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(54) Title: THIAZOLE DERIVATIVES AS ANDROGEN RECEPTOR MODULATOR COMPOUNDS

(57) Abstract: Provided herein are compounds that bind to androgen receptors and/or modulate activity of androgen receptors and/or modulate the amount of androgen receptors and/or reduce the number of androgen receptors in a cell and/or degrade androgen receptors in a cell; and to methods for making and using such compounds. Also provided are compositions containing such compounds and methods for making and using such compositions.

WO 2008/124000 A2

THIAZOLE DERIVATIVES AS ANDROGEN RECEPTOR MODULATOR COMPOUNDS

RELATED APPLICATIONS

Benefit of priority is claimed to U.S. Provisional Patent Application Serial No. 60/921,652, to Lin Zhi, E. Adam Kallel, Bao Ngoc Nguyen, Mark E. Adams, Yixing Shen, Thomas Lot Stevens Lau, Jyun-Hung Chen, John S. Tyhonas, Robert J. Ardecky, Todd A. Miller and Jon C. Loren, filed on April 2, 2007, entitled "THIAZOLE DERIVATIVES AS ANDROGEN RECEPTOR MODULATOR COMPOUNDS." Where permitted, the subject matter of the-above mentioned application is incorporated by reference in its entirety.

Field

Provided herein are compounds that bind to androgen receptors and/or modulate activity and/or amount of androgen receptors, and to methods for making and using such compounds. Also provided are compositions containing such compounds and methods for making and using such compositions.

Background

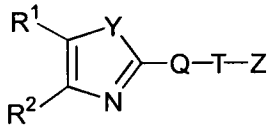
Intracellular receptors (IRs) regulate transcription of genes. *See e.g.*, R. M. Evans, Science, *240*, 889 (1988). Among such IRs are steroid receptors, such as androgen receptors, estrogen receptors, mineralocorticoid receptors and progesterone receptors.

Gene regulation by such receptors typically involves binding of an IR by a ligand, which can bind thereto forming a receptor/ligand complex. The receptor/ligand complex translocates to the nucleus of a cell, where it binds to the DNA of one or more gene regulatory regions. Once bound to the DNA of a particular gene regulatory region, a receptor/ligand complex may modulate the production of the protein encoded by that particular gene. Accordingly, an androgen receptor/ligand complex regulates expression of certain proteins. An androgen receptor/ligand complex can interact directly with the DNA of a particular gene regulatory region, and it also may interact with other transcription factors, such as activator protein-1 (AP-1) or nuclear factor κB (NFκB), and such interactions result in modulation of transcriptional activation.

Summary

Compounds that modulate the activity of androgen receptors are provided. Also provided are compositions that include the compounds and methods for modulating the activity of androgen receptor. Among the compounds provided herein are those that are agonists of androgen receptor. Other compounds provided herein are antagonists of androgen receptor. Also provided are selective androgen receptor partial agonists.

Provided herein are compounds of Formula I:



(I)

wherein:

R^1 is selected from among hydrogen, halogen, CN, NO_2, OR^C, NR^CR^D, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^2 is selected from among an optionally substituted monocyclic ring and an optionally substituted bicyclic ring system;

Y is selected from among NR^A, O and S;

R^A is selected from among hydrogen, OH, CN, NO_2, $(CH_2)_mR^B$, COR^C, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^B is selected from an optionally substituted aryl and an optionally substituted heteroaryl;

R^C and R^D each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^C and R^D are linked to form a non-aromatic 4-8 member ring;

Q is selected from among an optionally substituted C_1-C_{10} alkyl, an optionally substituted C_1-C_{10} heteroalkyl and an optionally substituted C_1-C_{10} haloalkyl;

T is an optionally substituted monocyclic 5-7 member ring or an optionally substituted bicyclic ring;

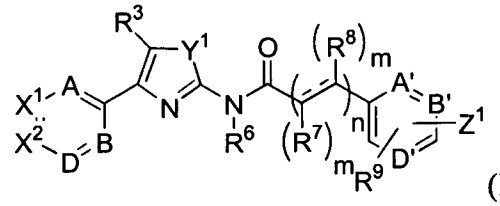
Z is selected from among hydrogen, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^B$, OR^C, NR^CR^D, $OCONR^CR^D$,

$NR^CCO_2R^D$, NR^CCOR^D, $NR^CCONR^CR^D$, COR^C, CO_2R^C, $S(O)_mR^C$, $(CH_2)_mS(O)_mR^C$, $NR^CSO_2R^D$, $SO_2NR^CR^D$ and $CONR^CR^D$;

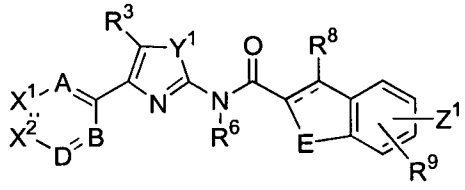
m is selected from among 0, 1 and 2;

and pharmaceutically acceptable salts and prodrugs thereof.

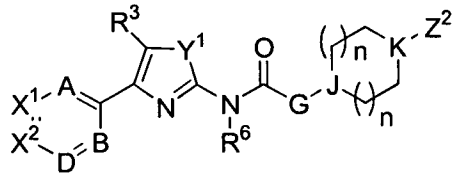
In certain embodiments, compounds of Formulae II-IV are provided as follow:



(II)



(III)



(IV)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from the group of hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl and C_1-C_{10} heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted

aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from among an optionally substituted aryl and an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, $-CH_2-$, CH_2CH_2-, $-CR^7=CR^8-$, $-CR^7=N-$;

G is $-(CH_2)_{0-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

Z^2 is as same as Z^1 when K is CH; or Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

m is selected from among 0, 1 and 2;

n is selected from among 0, 1 and 2; and

the dotted lines indicate optional double bonds;

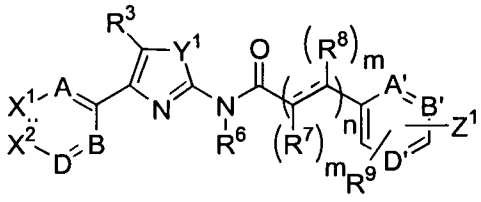
and pharmaceutically acceptable salts and prodrugs thereof;

provided that in formula II when n = 0, then R^4 and R^5, and/or, Z^1 and R^9 are linked to form a nonaromatic ring;

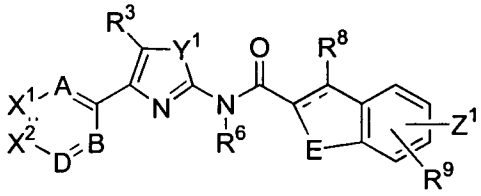
provided that in formula II when R^4 and R^5 are not linked to form a nonaromatic ring, n is 1, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$;

provided that in formula III when R^4 and R^5 are not linked to form a nonaromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

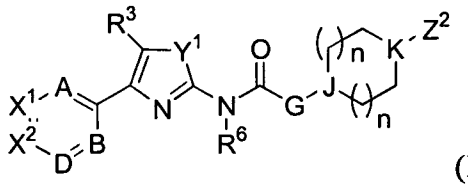
In certain embodiments, the compounds provided herein have a structure of Formula II or Formula III or Formula IV:



(II)



(III)



(IV)

wherein:

R^3 is selected from among hydrogen, OCH_3, CH_3;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3 and CH_3; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen;

R^7 and R^8 each independently is selected from among hydrogen, CF_3 and CH_3;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is C_1-C_8 alkyl or C_1-C_8 haloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

A, B and D each independently is CH or N;

A′, B′ and D′ are C;

E is selected from among S, O, NR^7, and $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1 and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In other embodiments, compounds provided herein are selective androgen receptor modulators, such as selective androgen receptor agonists or selective androgen receptor antagonists. Among the compounds provided herein are selective androgen receptor partial agonists. Among the compounds provided herein are those that are tissue-selective selective androgen receptor modulators, such as are selective androgen receptor binding compounds. In certain embodiments, compounds provided herein are selective androgen receptor reducing compounds. In certain embodiments, compounds provided herein are selective androgen receptor degrading compounds.

The compounds provided herein are effective for treating one or more androgen receptor mediated diseases or conditions. Diseases or conditions include any for which an androgen receptor antagonist or agonist would be effective. Such diseases and conditions include, but are not limited to, low muscle strength and function (*e.g.*, in the elderly); frailty or age-related functional decline ("ARFD") in the elderly (*e.g.*, sarcopenia); catabolic side effects of glucocorticoids; reduced bone mass, density or growth (*e.g.*, osteoporosis and osteopenia); chronic fatigue syndrome (CFS); chronic myalgia; acute fatigue syndrome and muscle loss following elective surgery (*e.g.*, post-surgical rehabilitation); slow wound healing; slow bone fracture repair; distraction osteogenesis; post-surgical adhesion formation; slow tooth repair or growth; loss of sensory function (*e.g.*, hearing, sight, olefaction and taste); periodontal disease; wasting secondary to fractures and wasting in connection with chronic obstructive pulmonary disease (COPD), chronic liver disease, AIDS, weightlessness, cancer cachexia, burn and trauma recovery, chronic catabolic state (*e.g.*, coma), eating disorders (*e.g.*, anorexia) and chemotherapy; cardiomyopathy; thrombocytopenia; growth retardation in connection with Crohn's disease; short bowel syndrome; irritable bowel syndrome; inflammatory bowel disease; Crohn's disease and ulcerative colitis; complications

associated with transplantation; physiological short stature including growth hormone deficient children and short stature associated with chronic illness; obesity and growth retardation associated with obesity; anorexia (*e.g.*, associated with cachexia or aging); hypercortisolism and Cushing's syndrome; Paget's disease; osteoarthritis; osteochondrodysplasias; depression, nervousness, irritability and stress; reduced mental energy and low self-esteem (*e.g.*, motivation/ assertiveness; low cognitive function (*e.g.*, dementia, including Alzheimer's disease and short term memory loss); catabolism in connection with pulmonary dysfunction and ventilator dependency; cardiac dysfunction (*e.g.*, associated with valvular disease, myocardial infarction, cardiac hypertrophy or congestive heart failure); high blood pressure; ventricular dysfunction or reperfusion events; catabolic state of aging; protein catabolic responses following trauma (*e.g.*, the catabolic state associated with surgery, congestive heart failure, cardiac myopathy, burns, cancer, COPD); cachexia and protein loss due to chronic illness such as cancer or AIDS; hyperinsulinemia including nesidioblastosis; immunosuppression; wasting in connection with multiple sclerosis or other neurodegenerative disorders; slow myelin repair; skin thinning; metabolic homeostasis and renal homeostasis (*e.g.*, in the frail elderly); low osteoblast number, bone remodeling and cartilage growth; insulin resistance, including NIDDM, in mammals (*e.g.*, humans); insulin resistance in the heart; poor sleep quality and the relative hyposomatotropism of senescence due to high increase in REM sleep and a decrease in REM latency; hypothermia; congestive heart failure; lipodystrophy (*e.g.*, in subjects taking HIV or AIDS therapies such as protease inhibitors); muscular atrophy (*e.g.*, due to physical inactivity, bed rest or reduced weight-bearing conditions); musculoskeletal impairment (*e.g.*, in the elderly); poor pulmonary function; sleep disorders; hirsutism, acne, seborrhea, androgenic alopecia, anemia, hyperpilosity, benign prostate hypertrophy, adenomas and neoplasies of the prostate (*e.g.*, advanced metastatic prostate cancer) and malignant tumor cells containing the androgen receptor, such as is the case for breast, brain, skin, ovarian, bladder, lymphatic, liver and kidney cancers; cancers of the skin, pancreas, endometrium, lung and colon; osteosarcoma; hypercalcemia of malignancy; metastatic bone disease; poor spermatogenesis; endometriosis and polycystic ovary syndrome; preeclampsia, eclampsia of pregnancy and preterm labor; premenstrual syndrome; vaginal dryness; age related decreased

testosterone levels in men, male menopause, hypogonadism, low male hormone levels, male and female sexual dysfunction (*e.g.*, erectile dysfunction, decreased sex drive, sexual well-being, decreased libido), male and female contraception, hair loss and Reaven's Syndrome.

Other diseases and conditions for which compounds provided herein are effective include, but are not limited to, treating one or more of acne, male-pattern baldness, wasting diseases, hirsutism, hypogonadism, osteoporoses, infertility, impotence and cancer. Others include, but are not limited to, treating prostate cancer. In certain embodiments, compounds provided herein are effective for treating androgen dependant prostate cancer. In other embodiments, compounds provided herein are effective for treating androgen independent prostate cancer. In certain embodiments, compounds provided herein are effective for treating androgen independent androgen receptor dependent prostate cancer.

Hence, methods of treatment of various diseases and conditions, including those listed above, by administering the compounds as described herein are provided.

In other embodiments, provided herein are methods for identifying a compound modulates an activity of an androgen receptor and/or decreases the number of functional androgen receptors by contacting a cell expressing an androgen receptor with a compound provided herein and monitoring an effect of the compound upon the cell.

In certain embodiments, provided herein are methods for treating a subject by administering to the subject a compound provided herein. In certain embodiments, provided herein are methods for treating a subject by identifying a subject in need of such a treatment and administering to the subject a compound provided herein. In certain embodiments, the methods provided herein are for increase or maintenance of muscle strength and function (*e.g.*, in the elderly); reversal or prevention of frailty or age-related functional decline ("ARFD") in the elderly (*e.g.*, sarcopenia); treatment of catabolic side effects of glucocorticoids; prevention and/or treatment of reduced bone mass, density or growth (*e.g.*, osteoporosis and osteopenia); treatment of chronic fatigue syndrome (CFS); chronic myalgia; treatment of acute fatigue syndrome and muscle loss following elective surgery (*e.g.*, post-surgical rehabilitation); accelerating of wound healing; accelerating bone fracture repair (such as accelerating the recovery

of hip fracture patients); accelerating healing of complicated fractures, *e.g.* distraction osteogenesis; in joint replacement; prevention of post-surgical adhesion formation; acceleration of tooth repair or growth; maintenance of sensory function (*e.g.*, hearing, sight, olefaction and taste); treatment of periodontal disease; treatment of wasting secondary to fractures and wasting in connection with chronic obstructive pulmonary disease (COPD), chronic liver disease, AIDS, weightlessness, cancer cachexia, burn and trauma recovery, chronic catabolic state (*e.g.*, coma), eating disorders (*e.g.*, anorexia) and chemotherapy; treatment of cardiomyopathy; treatment of thrombocytopenia; treatment of growth retardation in connection with Crohn's disease; treatment of short bowel syndrome; treatment of irritable bowel syndrome; treatment of inflammatory bowel disease; treatment of Crohn's disease and ulcerative colitis; treatment of complications associated with transplantation; treatment of physiological short stature including growth hormone deficient children and short stature associated with chronic illness; treatment of obesity and growth retardation associated with obesity; treatment of anorexia (*e.g.*, associated with cachexia or aging); treatment of hypercortisolism and Cushing's syndrome; Paget's disease; treatment of osteoarthritis; induction of pulsatile growth hormone release; treatment of osteochondrodysplasias; treatment of depression, nervousness, irritability and stress; treatment of reduced mental energy and low self-esteem (*e.g.*, motivation/assertiveness); improvement of cognitive function (*e.g.*, the treatment of dementia, including Alzheimer's disease and short term memory loss); treatment of catabolism in connection with pulmonary dysfunction and ventilator dependency; treatment of cardiac dysfunction (*e.g.*, associated with valvular disease, myocardial infarction, cardiac hypertrophy or congestive heart failure); lowering blood pressure; protection against ventricular dysfunction or prevention of reperfusion events; treatment of adults in chronic dialysis; reversal or slowing of the catabolic state of aging; attenuation or reversal of protein catabolic responses following trauma (*e.g.*, reversal of the catabolic state associated with surgery, congestive heart failure, cardiac myopathy, burns, cancer, COPD etc.); reducing cachexia and protein loss due to chronic illness such as cancer or AIDS; treatment of hyperinsulinemia including nesidioblastosis; treatment of immuno-suppressed subjects; treatment of wasting in connection with multiple sclerosis or other neurodegenerative disorders; promotion of myelin repair; maintenance of skin

thickness; treatment of metabolic homeostasis and renal homeostasis (*e.g.*, in the frail elderly); stimulation of osteoblasts, bone remodeling and cartilage growth; regulation of food intake; treatment of insulin resistance, including NIDDM, in mammals (*e.g.*, humans); treatment of insulin resistance in the heart; improvement of sleep quality and correction of the relative hyposomatotropism of senescence due to high increase in REM sleep and a decrease in REM latency; treatment of hypothermia; treatment of congestive heart failure; treatment of lipodystrophy (*e.g.*, in subjects taking HIV or AIDS therapies such as protease inhibitors); treatment of muscular atrophy (*e.g.*, due to physical inactivity, bed rest or reduced weight-bearing conditions); treatment of musculoskeletal impairment (*e.g.*, in the elderly); improvement of the overall pulmonary function; treatment of sleep disorders; and the treatment of the catabolic state of prolonged critical illness; treatment of hirsutism, acne, seborrhea, androgenic alopecia, anemia, hyperpilosity, benign prostate hypertrophy, adenomas and neoplasies of the prostate (*e.g.*, advanced metastatic prostate cancer) and malignant tumor cells containing the androgen receptor, such as is the case for breast, brain, skin, ovarian, bladder, lymphatic, liver and kidney cancers; cancers of the skin, pancreas, endometrium, lung and colon; osteosarcoma; hypercalcemia of malignancy; metastatic bone disease; treatment of spermatogenesis, endometriosis and polycystic ovary syndrome; counteracting preeclampsia, eclampsia of pregnancy and preterm labor; treatment of premenstrual syndrome; treatment of vaginal dryness; age related decreased testosterone levels in men, male menopause, hypogonadism, male hormone replacement, male and female sexual dysfunction (*e.g.*, erectile dysfunction, decreased sex drive, sexual well-being, decreased libido), male and female contraception, hair loss, Reaven's Syndrome and the enhancement of bone and muscle performance/strength.

In certain of such embodiments, the subject has a condition selected from acne, male-pattern baldness, wasting diseases, hirsutism, hypogonadism, osteoporoses, infertility, impotence and cancer.

In certain embodiments, the methods provided herein are for treating a condition including, but not limited to, prostate cancer. In certain such embodiments, the prostate cancer is androgen independent prostate cancer. In certain embodiments, the prostate cancer is androgen independent androgen receptor dependant prostate cancer.

Also, provided herein are methods for modulating an activity of an androgen receptor by contacting an androgen receptor with at least one compound provided herein. In certain such embodiments, the androgen receptor is in a cell.

In certain embodiments, provided herein are methods for decreasing the number of functional androgen receptors present in a cell by contacting an androgen receptor with at least one compound provided herein.

Also, provided are compositions containing the compounds provided herein. In particular, pharmaceutical compositions formulated for administration by an appropriate route and method containing effective concentrations of one or more of the compounds provided herein, or pharmaceutically acceptable derivatives thereof, that deliver amounts effective for the treatment, prevention, or amelioration of one or more symptoms of diseases or disorders that are modulated or otherwise affected by androgen receptor activity, or in which androgen receptor activity is implicated, also are provided. The effective amounts and concentrations are effective for ameliorating any of the symptoms of any of the diseases or disorders or conditions. In certain embodiments, provided herein is a pharmaceutical composition containing: i) a physiologically acceptable carrier, diluent, and/or excipient; and ii) one or more compounds provided herein.

Articles of manufacture containing packaging material, within the packaging material a compound or composition, or pharmaceutically acceptable derivative thereof, which is effective for modulating the activity of androgen receptor, or for treatment, prevention or amelioration of one or more symptoms of androgen receptor mediated diseases or disorders, or diseases or disorders in which androgen receptor activity is implicated, and a label that indicates that the compound or composition, or pharmaceutically acceptable derivative thereof, is used for modulating the activity of androgen receptor, or for treatment, prevention or amelioration of one or more symptoms of androgen receptor mediated diseases or disorders, or diseases or disorders in which androgen receptor activity is implicated, are provided.

Detailed Description

A. Definitions

Unless defined otherwise, all technical and scientific terms used herein have the same meaning as is commonly understood by one of skill in the art to which the

claimed subject matter belongs. All patents, patent applications, published materials referred to throughout the entire disclosure herein, unless noted otherwise, are incorporated by reference in their entirety for any purpose. In the event that there are a plurality of definitions for terms herein, those in this section prevail. Where reference is made to a URL or other such identifier or address, it understood that such identifiers can change and particular information on the internet can come and go, but equivalent information can be found by searching the internet. Reference thereto evidences the availability and public dissemination of such information.

It is to be understood that the foregoing general description and the following detailed description are exemplary and explanatory only and are not restrictive of the subject matter claimed.

Unless specific definitions are provided, the nomenclatures use in connection with, and the laboratory procedures and techniques of, analytical chemistry, synthetic organic chemistry, and medicinal and pharmaceutical chemistry described herein are those known in the art. Standard techniques can be used for chemical syntheses, chemical analyses, pharmaceutical preparation, formulation and delivery, and treatment of subjects. Standard techniques can be used for recombinant DNA, oligonucleotide synthesis, and tissue culture and transformation (*e.g.*, electroporation, lipofection). Reactions and purification techniques can be performed *e.g.,* using kits according to manufacturer's specifications or as commonly accomplished in the art or as described herein. The foregoing techniques and procedures generally are performed according to conventional methods well known in the art and as described in various general and more specific references that are cited and discussed throughout the present specification. *See e.g.*, Sambrook *et al.* Molecular Cloning: A Laboratory Manual (2d ed., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y. (1989).

As used herein, use of the singular includes the plural unless specifically stated otherwise.

As used herein, "or" means "and/or" unless stated otherwise. Furthermore, use of the term "including" as well as other forms, such as "includes," and "included," is not limiting.

As used herein, the term "selective binding compound" refers to a compound that selectively binds to any portion of one or more target receptors.

As used herein, the term "selective binding compound" refers to a compound that selectively binds to any portion of one or more target receptors.

As used herein, the term "selective androgen receptor binding compound" refers to a compound that selectively or preferentially binds to any portion of an androgen receptor.

As used herein, the term "selective androgen receptor reducing compound" refers to a compound, the presence of which results in a decrease in the number of functional androgen receptors in a cell. In certain embodiments, the presence of a selective androgen receptor reducing compound results in a decrease of at least 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, 98%, or 99% of the functional androgen receptors in a cell.

As used herein, the term "functional androgen receptor" refers to an androgen receptor that is capable of performing at least one activity associated with intact or native androgen receptors.

As use herein, the term "selective androgen receptor degrading compound" refers to a compound, the presence of which results in degradation of androgen receptors in a cell. In certain embodiments, the presence of a selective androgen receptor degrading compound results in degradation of at least 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, 98%, or 99% of the androgen receptors in a cell. In certain embodiments, selective androgen receptor degrading compounds destabilize androgen receptors resulting in their degradation.

As used herein, the term "selectively binds" refers to the ability of a selective binding compound to bind to a target receptor with greater affinity than it binds to a non-target receptor. In certain embodiments, specific binding refers to binding to a target with an affinity that is at least 10, 50, 100, 250, 500, 1000 or more times greater than the affinity for a non-target.

As used herein, the term "target receptor" refers to a molecule or a portion of a receptor capable of being bound by a selective binding compound. In certain embodiments, a target receptor is an androgen receptor.

As used herein, the terms "treating" or "treatment" encompass either or both responsive and prophylaxis measures, *e.g.*, designed to inhibit, slow or delay the onset of a symptom of a disease or disorder, achieve a full or partial reduction of a symptom or disease state, and/or to alleviate, ameliorate, lessen, or cure a disease or disorder and/or its symptoms.

As used herein, the term "androgen receptor mediated disease or disorder" refers to a condition, disease or disorder that is modulated by an androgen receptor, or a disease or disorder in which androgen receptor activity is implicated, or results, either directly or indirectly, from binding of a ligand to androgen receptor. Androgen receptor mediated disease or disorder include any for which administration of an androgen receptor antagonist or agonist is effective. Such diseases and conditions include, but are not limited to, loss of muscle strength and function (*e.g.*, in the elderly); frailty or age-related functional decline ("ARFD") in the elderly (*e.g.*, sarcopenia); catabolic side effects of glucocorticoids; reduced bone mass, density or growth (*e.g.*, osteoporosis and osteopenia); chronic fatigue syndrome (CFS); chronic myalgia; acute fatigue syndrome and muscle loss following elective surgery (*e.g.*, post-surgical rehabilitation); slow wound healing; slow bone fracture repair; distraction osteogenesis; post-surgical adhesion formation; slow tooth repair or growth; loss of sensory function (*e.g.*, hearing, sight, olefaction and taste); periodontal disease; wasting secondary to fractures and wasting in connection with chronic obstructive pulmonary disease (COPD), chronic liver disease, AIDS, weightlessness, cancer cachexia, burn and trauma recovery, chronic catabolic state (*e.g.*, coma), eating disorders (*e.g.*, anorexia) and chemotherapy; cardiomyopathy; thrombocytopenia; growth retardation in connection with Crohn's disease; short bowel syndrome; irritable bowel syndrome; inflammatory bowel disease; Crohn's disease and ulcerative colitis; complications associated with transplantation; physiological short stature in growth hormone deficient children and short stature associated with chronic illness; obesity and growth retardation associated with obesity; anorexia (*e.g.*, associated with cachexia or aging); hypercortisolism and Cushing's syndrome; Paget's disease; osteoarthritis; osteochondrodysplasias; depression, nervousness, irritability and stress; reduced mental energy and low self-esteem (*e.g.*, motivation/ assertiveness); impaired cognitive function (*e.g.*, dementia, including Alzheimer's disease and short term

memory loss); catabolism connected with pulmonary dysfunction and ventilator dependency; cardiac dysfunction (*e.g.*, associated with valvular disease, myocardial infarction, cardiac hypertrophy or congestive heart failure); high blood pressure; ventricular dysfunction or reperfusion events; conditions associated with chronic dialysis; catabolic state resulting from aging; protein catabolic responses following trauma (*e.g.*, catabolic state associated with surgery, congestive heart failure, cardiac myopathy, burns, cancer, COPD); cachexia and protein loss due to chronic illness such as cancer or AIDS; hyperinsulinemia including nesidioblastosis; immunosuppression; wasting in connection with multiple sclerosis or other neurodegenerative disorders; low myelin repair; skin thinning; metabolic homeostasis and renal homeostasis (*e.g.*, in the frail elderly); low osteoblast activity, bone remodeling and cartilage growth; insulin resistance, including NIDDM, in mammals (*e.g.*, humans); insulin resistance in the heart; poor sleep quality and relative hyposomatotropism of senescence due to high increase in REM sleep and a decrease in REM latency; hypothermia; congestive heart failure; lipodystrophy (*e.g.*, in subjects taking HIV or AIDS therapies such as protease inhibitors); muscular atrophy (*e.g.*, due to physical inactivity, bed rest or reduced weight-bearing conditions musculoskeletal impairment (*e.g.*, in the elderly); poor pulmonary function; sleep disorders; the catabolic state of prolonged critical illness; hirsutism, acne, seborrhea, androgenic alopecia, anemia, hyperpilosity, benign prostate hypertrophy, adenomas and neoplasies of the prostate (*e.g.*, advanced metastatic prostate cancer) and malignant tumor cells containing the androgen receptor, such as is the case for breast, brain, skin, ovarian, bladder, lymphatic, liver and kidney cancers; cancers of the skin, pancreas, endometrium, lung and colon; osteosarcoma; hypercalcemia of malignancy; metastatic bone disease; reduced spermatogenesis, endometriosis and polycystic ovary syndrome; preeclampsia, eclampsia of pregnancy and preterm labor; premenstrual syndrome; vaginal dryness; age related decreased testosterone levels in men, male menopause, hypogonadism, low male hormone levels, male and female sexual dysfunction (*e.g.*, erectile dysfunction, decreased sex drive, sexual well-being, decreased libido), male and female contraception, hair loss and Reaven's Syndrome.

As used herein, "androgen-dependent prostate cancer" refers to prostate cancer in which the cancer cells require serum androgen to proliferate and survive.

As used herein, "androgen-independent prostate cancer" refers to prostate cancer in which the cancer cells do not require serum androgen to proliferate and survive.

As used herein, amelioration of the symptoms of a particular disorder by administration of a particular compound or pharmaceutical composition refers to any lessening of severity, delay in onset, slowing of progression, or shortening of duration, whether permanent or temporary, lasting or transient that can be attributed to or associated with administration of the compound or composition.

As used herein, the term "modulate" or "modulating" refers to an alteration in the activity of a molecule. Modulating refers to an increase or decrease in the magnitude of a certain activity of a molecule. In certain embodiments, "modulate" refers to inhibiting or decreases the magnitude of one or more activities of a molecule. In certain embodiments, "modulate" refers to activating or increasing the magnitude of at least one activity of a molecule.

As used herein, the term "modulator" refers to a compound that alters an activity of a molecule. For example, a modulator can cause an increase or decrease in the magnitude of a certain activity of a molecule compared to the magnitude of the activity in the absence of the modulator. In certain embodiments, a modulator is an inhibitor, which decreases the magnitude of one or more activities of a molecule. In certain embodiments, an inhibitor completely prevents one or more activities of a molecule. In certain embodiments, a modulator is an activator, which increases the magnitude of at least one activity of a molecule. In certain embodiments the presence of a modulator results in an activity that does not occur in the absence of the modulator.

As used herein, the term "selective modulator" refers to a compound that selectively or preferentially modulates a target activity.

As used herein, the term "selective androgen receptor modulator" refers to a compound that selectively modulates at least one activity associated with an androgen receptor.

As used herein, the term "selective androgen receptor agonist" refers to a compound that selectively or preferentially activates an androgen receptor to the same extent as or to a greater extent than the presence of a naturally occurring ligand for the androgen receptor.

As used herein, the term "selective androgen receptor antagonist" refers to a compound that selectively or preferentially deactivates an androgen receptor.

As used herein, the term "selective androgen receptor partial agonist" refers to a compound that selectively or preferentially activates an androgen receptor, resulting in an activity of a receptor that is of the same type as that resulting from the presence of a naturally occurring ligand for the receptor, but of a lower magnitude.

As used herein, the term "selectively modulates" refers to the ability of a selective modulator to modulate a target activity to a greater extent than it modulates a non-target activity. In certain embodiments the target activity is selectively modulated by, for example about 2 fold up to more that about 500 fold, in some embodiments, about 2, 5, 10, 50, 100, 150, 200, 250, 300, 350, 400, 450 or more than 500 fold.

As used herein, "target activity" of an androgen receptor refers to any *in vitro* or *in vivo* activity exhibited by the receptor, and includes, but is not limited to, ligand binding, transcriptional regulation, binding affinity, signal transduction, enzymatic activity, change in cell activity, tumor growth, inflammation or inflammation-related processes, and amelioration of one or more symptoms associated with a disease or condition.

Various methods for identifying compounds having agonist or antagonist activity of the androgen receptor can be used. In one embodiment, antagonist activity in hormone-dependent tumors is ascertained via screening for inhibition of growth, either *in vitro* or *in vivo*, in hormone-dependent tumor cell lines. Examples of hormone-dependent tumor cell lines that can be used for screening AR modulators include, but are not limited to, human breast tumor cell line MDA MB453, human breast tumor cell line ZR-75-1, murine breast line Shionogi, rat prostate adenocarcinoma line Dunning R-3327, human prostate tumor cell line MDA PCa 2a and PCa 2b, human prostate cell line LNCap, human prostate tumor cell line CWR22, human prostate tumor cell line LuCaP 35 and LuCaP 23.12, human prostate cell line LAPC-4 and LAPC-9, human prostate tumor cell line PC-295, human prostate tumor cell line PC-310, and human osteosarcoma cell line MG-63. These experimental human and murine prostate and breast cell lines and the tumor model systems derived therein are well accepted by those of skill in the art as indicative of the pharmacology

of human hormone-dependent tumors, such as prostate cancer. Examples of the relationship of such models to the human disease state can be found in, but are not limited to, the following references: Suzuki *et al.*, J. Steroid Biochem. Mol. Biol. 37: 559-567 (1990), Isaacs, Urol. Oncol. 2: 115-116 (1996), Leland, Urol. Oncol. 2: 126-128 (1996), Peehl, Urol. Oncol. 2: 100-102 (1996), Wytske *et al.*, Urol. Oncol. 2: 122-125 (1996), Klein *et al.*, Nature Medicine 3: 402-408 (1997), Navone *et al.*, Clin. Cancer Res. 3: 2493-2500 (1997), Chen *et al.*, Cancer Res. 58: 2777-2783 (1998), Bentei *et al.*, In Vitro Cell Dev. Biol. 35: 655-662 (1999), Craft *et al.*, Cancer Res. 59: 5030-5036 (1999), Jacques *et al.*, Endocrinology 140: 416-421 (1999), Jongsma *et al.*, Amer. J. Path. 154: 543-551 (1999), Sharma *et al.*, Oncogene 18: 5349-5355 (1999), Yeap *et al.*, Endocrinology 140: 3282-3291 (1999), Buhler *et al.*, The Prostate 43: 63-70 (2000), Etreby *et al.*, The Prostate 42: 99-106 (2000), Navone *et al.*, Clin. Cancer Res. 6: 1190-1197 (2000), Jongsma *et al.*, Cancer Res. 60: 741-748 (2000) and Ye *et al.*, Clin. Cancer Res. 5: 2171-2177 (1999).

The agonist or antagonist activity of a potential AR modulator is also measured in a normal, nontumor cell line. Examples of normal, nontumor cells lines useful in such methods include, but are not limited to, primary rat prostate epithelial and stromal cells, murine muscle cell line C2C12, primary guinea pig smooth muscle cells, primary smooth-muscle cells from immature (I-PSMC) or adult (A-PSMC) rat penis, primary rabbit smooth muscle cell line, prostatic smooth muscle cell line PS-1, prostatic smooth muscle cell line PSMC1, mouse bone cell cultures and osteoblasts cells and primary rat seminal vesicle lines SVC-1 and SCV-2. Such cell lines are described in the following exemplary references: Tajana *et al.*, EMBO J. 3: 637-644 (1984), Zhuang *et al.*, J. Steroid Biochem. Mol. Biol. 41: 693-696 (1992), Gonzalez-Cadavid *et al.*, Mol. Cell. Endocrinol. 90: 219-229 (1993), Ricciardelli *et al.*, J. Endocrinol. 140: 373-383 (1994), Zhang *et al.*, Prostate 30: 117-129 (1997), Gerdes *et al.*, Endocrinology 139: 3569-3577 (1998), Nemeth *et al.*, J. Andrology 19: 718-724 (1998), Sadeghi-Nejad *et al.*, Int. J. Impotence Res. 10: 165-169 (1998), Sarah *et al.*, J. Cell. Physiol. 185, 416-424 (2000) and Chen *et al.*, FEBS Letters 491: 91-93 (2001).

The agonist and antagonist effects of the disclosed compounds also are measured in nontumor tissues via a series of *in vivo* rat models in which surrogate endpoints are measured in tissues including, but not limited to, the prostate and

seminal vesicle, as well as the hypothalmic axis via measurement of plasma luteinizing hormone (LH) levels. Several surrogate endpoint *in vivo* assays also are used to examine the effects of the compounds on the AR pathway. These assays involve measuring the effects of compounds on normal androgen dependent tissues and functions, such as, but not limited to, prostate, seminal vesicle, bone, libido, fertility and hypothalamus (measurement of blood LH levels). These assays are widely recognized as having a direct correlation to the effects of AR modulators on the AR pathways in humans. Exemplary surrogate endpoint *in vivo* assays are described in the following references: Maucher *et al.*, J. Cancer Res. Clin. Oncol. 119, 669-674 (1993), Furr *et al.*, Eur. Urol 29: 83-95 (1996), Broulik *et al.*, Bone 20: 473-475 (1997), Hamann *et al.*, J. Med. Chem. 41: 623-639 (1998), Ashby *et al.*, J. Appl. Tox. 20: 35-47 (2000) and Yamada *et al.*, Tox. Sciences 53: 289-296 (2000).

Animal models that have a hormone-dependent tumor also are used to assess the antagonist activity of an AR modulator against the tumor and the agonist or antagonist activity against AR-containing normal nontumor tissues in the animal. For example, the above surrogate endpoint *in vivo* assays can be run using a rat having an androgen-dependent rat prostate tumor, such as the Dunning R-3327. In this model, effects of an AR modulator on a rat androgen-dependent prostate tumor can be determined while simultaneously examining the effects of the AR modulator on AR-containing normal nontumor tissues such as, but not limited to, prostate tissue, as well as effects on the hypothalmic axis via measurements of plasma LH levels. In a similar fashion, immune compromised nude rats having human androgen-dependent prostate tumors can be used. In this model, effects of an AR modulator on a human androgen-dependent prostate tumor can be determined while simultaneously examining the effects of the AR modulator on normal tissues such as, but not limited to, prostate tissue, as well as effects on the hypothalmic axis via measurements of plasma LH levels. In addition, *in vivo* rat assays are used to determine the effect of AR modulators on libido and reproduction.

The results of such assays that indicate that a compound exhibits an activity that can be correlated to activity of the compound *in vivo*, such activity can be referred to as biological activity. Activity can be any level of percentage of activity of the modulating compound, including but not limited to, 1% of the activity, 2%, 3%,

4%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, 96%, 97%, 98%, 99%, 100%, 200%, 300%, 400%, 500%, or more of activity compared to a reference modulating compound, such as for example, testosterone or dihydrotestosterone. The particular level of activity needed to be retained or for the compound to exhibit is a function of the intended use of the compound and can be empirically determined.

As used herein, the term "receptor mediated activity" refers any activity that results, either directly or indirectly, from binding of a ligand to a receptor.

As used herein, the term "agonist" refers to a compound, the presence of which results in an activity of a receptor that is the same as the activity resulting from the presence of a naturally occurring ligand for the receptor.

As used herein, the term "partial agonist" refers to a compound the presence of which results in an activity of a receptor that is of the same type as that resulting from the presence of a naturally occurring ligand for the receptor, but of a lower magnitude.

As used herein, the term "antagonist" refers to a compound, the presence of which results in a decrease in the magnitude of an activity of a receptor. In certain embodiments, the presence of an antagonist results in complete inhibition of an activity of a receptor.

As used herein, the IC_{50} refers to an amount, concentration or dosage of a particular test compound that achieves a 50% inhibition of a maximal response, such as modulation of androgen receptor activity, in an assay that measures such response.

As used herein, EC_{50} refers to a dosage, concentration or amount of a particular test compound that elicits a dose-dependent response at 50% of maximal expression of a particular response that is induced, provoked or potentiated by the particular test compound.

As used herein, C_1-C_x includes C_1-C_2, C_1-C_3 . . . C_1-C_x.

As used herein, the term "alkyl" alone or in combination refers to a straight, branched, or cyclic chain containing at least one carbon atom. An alkyl group can be a "saturated alkyl," which means that it does not contain any alkene or alkyne groups. An alkyl group can be an "unsaturated alkyl," which means that it contains at least one alkene or alkyne group. In certain embodiments, alkyls are optionally substituted.

In certain embodiments, an alkyl contains 1 to 20 carbon atoms (whenever it appears herein, a numerical range such as "1 to 20" refers to each integer in the given

range; *e.g.*, "1 to 20 carbon atoms" means that an alkyl group can contain only 1 carbon atom, 2 carbon atoms, 3 carbon atoms, *etc.*, up to and including 20 carbon atoms, although the term "alkyl" also includes instances where no numerical range of carbon atoms is designated). An alkyl can be designated as "C_1-C_4 alkyl" or similar designations. By way of example only, "C_1-C_4 alkyl" indicates an alkyl having one, two, three, or four carbon atoms, i.e., the alkyl is selected from among methyl, ethyl, propyl, iso-propyl, *n*-butyl, iso-butyl, sec-butyl and *t*-butyl. Thus $C_1 - C_4$ includes $C_1 - C_2$ and $C_1 - C_3$ alkyl. Alkyls can be substituted or unsubstituted. Alkyls include, but are not limited to, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, tertiary butyl, pentyl, hexyl, ethenyl, propenyl, butenyl, cyclopropyl, cyclobutyl, cyclopentyl, and cyclohexyl, each of which optionally are substituted.

As used herein, the term "alkenyl" alone or in combination refers to an alkyl group containing at least one carbon-carbon double bond. In certain embodiments, alkenyls are optionally substituted.

As used herein, the term "alkynyl" alone or in combination refers to an alkyl group containing at least one carbon-carbon triple bond. In certain embodiments, alkynyls are optionally substituted.

As used herein, the term "non-cyclic alkyl" refers to an alkyl that is not cyclic (i.e., a straight or branched chain containing at least one carbon atom). Non-cyclic alkyls can be fully saturated or can contain non-cyclic alkenes and/or alkynes. Non-cyclic alkyls can be optionally substituted.

As used herein, the term "haloalkyl" alone or in combination refers to an alkyl in which at least one hydrogen atom is replaced with a halogen atom. In certain of the embodiments in which two or more hydrogen atom are replaced with halogen atoms, the halogen atoms are all the same as one another. In certain of such embodiments, the halogen atoms are not all the same as one another. Certain haloalkyls are saturated haloalkyls, which do not include any carbon-carbon double bonds or any carbon-carbon triple bonds. Certain haloalkyls are haloalkenes, which include one or more carbon-carbon double bonds. Certain haloalkyls are haloalkynes, which include one or more carbon-carbon triple bonds. In certain embodiments, haloalkyls are optionally substituted

As used herein, the term "heteroalkyl" alone or in combination refers to a group containing an alkyl and one or more heteroatoms. Certain heteroalkyls are saturated heteroalkyls, which do not contain any carbon-carbon double bonds or any carbon-carbon triple bonds. Certain heteroalkyls are heteroalkenes, which include at least one carbon-carbon double bond. Certain heteroalkyls are heteroalkynes, which include at least one carbon-carbon triple bond. Certain heteroalkyls are acylalkyls, in which the one or more heteroatoms are within an alkyl chain. Examples of heteroalkyls include, but are not limited to, $CH_3C(=O)CH_2$-, $CH_3C(=O)CH_2CH_2$-, $CH_3CH_2C(=O)CH_2CH_2$-, $CH_3C(=O)CH_2CH_2CH_2$-, $CH_3OCH_2CH_2$-, $CH_3OC(=O)CH_2$- and CH_3NHCH_2-. In certain embodiments, heteroalkyls are optionally substituted.

As used herein, the term "heterohaloalkyl" alone or in combination refers to a heteroalkyl in which at least one hydrogen atom is replaced with a halogen atom. In certain embodiments, heteroalkyls are optionally substituted.

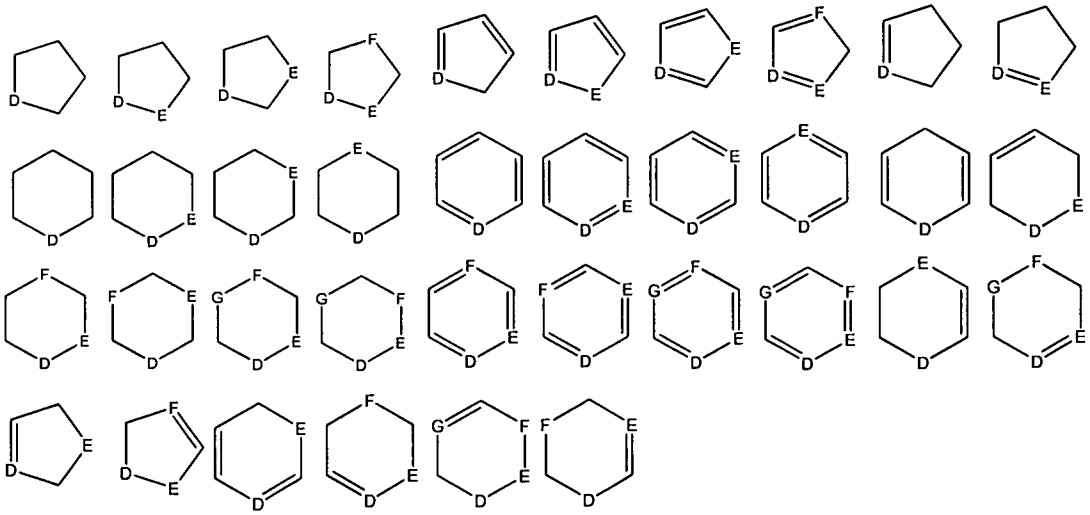
As used herein, the term "ring" refers to any covalently closed structure. Rings include, for example, carbocycles (*e.g.*, aryls and cycloalkyls), heterocycles (*e.g.*, heteroaryls and non-aromatic heterocycles), aromatics (*e.g.*, aryls and heteroaryls), and non-aromatics (*e.g.*, cycloalkyls and non-aromatic heterocycles). Rings can be optionally substituted. Rings can form part of a ring system.

As used herein, the term "ring system" refers to two or more rings, wherein two or more of the rings are fused. The term "fused" refers to structures in which two or more rings share one or more bonds.

As used herein, the term "carbocycle" refers to a ring, wherein each of the atoms forming the ring is a carbon atom. Carbocyclic rings can be formed by three, four, five, six, seven, eight, nine, or more than nine carbon atoms. Carbocycles can be optionally substituted.

As used herein, the term "heterocycle" refers to a ring wherein at least one atom forming the ring is a carbon atom and at least one atom forming the ring is a heteroatom. Heterocyclic rings may be formed by three, four, five, six, seven, eight, nine, or more than nine atoms. Any number of those atoms can be heteroatoms (i.e., a heterocyclic ring can contain one, two, three, four, five, six, seven, eight, nine, or more than nine heteroatoms, provided that at lease one atom in the ring is a carbon atom). Herein, whenever the number of carbon atoms in a heterocycle is indicated (*e.g.*, C_1-C_6

heterocycle), at least one other atom (the heteroatom) must be present in the ring. Designations such as "C_1-C_6 heterocycle" refer only to the number of carbon atoms in the ring and do not refer to the total number of atoms in the ring. It is understood that the heterocyclic ring will have additional heteroatoms in the ring. Designations such as "4-6 membered heterocycle" refer to the total number of atoms that comprise the ring (i.e., a four, five, or six membered ring, in which at least one atom is a carbon atom, at least one atom is a heteroatom and the remaining two to four atoms are either carbon atoms or heteroatoms). In heterocycles containing two or more heteroatoms, those two or more heteroatoms can be the same or different from one another. Heterocycles can be optionally substituted. Binding to a heterocycle can be at a heteroatom or via a carbon atom. Examples of heterocycles include, but are not limited to the following:



wherein D, E, F and G independently represent a heteroatom. Each of D, E, F and G can be the same or different from one another.

As used herein, the term "heteroatom" refers to an atom other than carbon or hydrogen. Heteroatoms are typically independently selected from oxygen, sulfur, nitrogen and phosphorus, but are not limited to those atoms. In embodiments in which two or more heteroatoms are present, the two or more heteroatoms can all be the same as one another, or some or all of the two or more heteroatoms can each be different from the others.

As used herein, the term "bicyclic ring" refers to two rings, wherein the two rings are fused. Bicyclic rings include, for example, decaline, pentalene, indene, naphthalene, azulene, heptalene, isobenzofuran, chromene, indolizine, isoindole,

indole, indoline, purine, quinolizine, isoquinoline, quinoline, phthalazine, naphthyridididine, quinoxaline, cinnoline, pteridine, isochroman, chroman and various hydrogenated derivatives thereof. Bicyclic rings can be optionally substituted. Each ring is independently aromatic or non-aromatic. In certain embodiments, both rings are aromatic. In certain embodiments, both rings are non-aromatic. In certain embodiments, one ring is aromatic and one ring is non-aromatic.

As used herein, the term "aromatic" refers to a planar ring having a delocalized π-electron system containing 4n+2 π electrons, where n is an integer. Aromatic rings can be formed by five, six, seven, eight, nine, or more than nine atoms. Aromatics can be optionally substituted. Examples of aromatic groups include, but are not limited to phenyl, naphthalenyl, phenanthrenyl, anthracenyl, tetralinyl, fluorenyl, indenyl and indanyl. The term aromatic includes, for example, benzenoid groups, connected via one of the ring-forming carbon atoms, and optionally carrying one or more substituents selected from an aryl, a heteroaryl, a cycloalkyl, a non-aromatic heterocycle, a halo, a hydroxy, an amino, a cyano, a nitro, an alkylamido, an acyl, a C_{1-6} alkoxy, a C_{1-6} alkyl, a C_{1-6} hydroxyalkyl, a C_{1-6} aminoalkyl, a C_{1-6} alkylamino, an alkylsulfenyl, an alkylsulfinyl, an alkylsulfonyl, an sulfamoyl, or a trifluoromethyl. In certain embodiments, an aromatic group is substituted at one or more of the para, meta, and/or ortho positions. Examples of aromatic groups containing substitutions include, but are not limited to, phenyl, 3-halophenyl, 4-halophenyl, 3-hydroxyphenyl, 4-hydroxyphenyl, 3-aminophenyl, 4-aminophenyl, 3-methylphenyl, 4-methylphenyl, 3-methoxyphenyl, 4-methoxyphenyl, 4-trifluoromethoxyphenyl, 3-cyano-phenyl, 4-cyanophenyl, dimethylphenyl, naphthyl, hydroxynaphthyl, hydroxymethylphenyl, (trifluoromethyl)phenyl, alkoxyphenyl, 4-morpholin-4-ylphenyl, 4-pyrrolidin-1-ylphenyl, 4-pyrazolylphenyl, 4-triazolylphenyl and 4-(2-oxopyrrolidin-1-yl)phenyl.

As used herein, the term "aryl" refers to an aromatic ring wherein each of the atoms forming the ring is a carbon atom. Aryl rings can be formed by three, four, five, six, seven, eight, nine, or more than nine carbon atoms. Aryl groups can be optionally substituted.

As used herein, the term "heteroaryl" refers to an aromatic ring in which at least one atom forming the aromatic ring is a heteroatom. Heteroaryl rings can be formed by three, four, five, six, seven, eight, nine and more than nine atoms. Heteroaryl groups

can be optionally substituted. Examples of heteroaryl groups include, but are not limited to, aromatic C_{3-8} heterocyclic groups containing one oxygen or sulfur atom or up to four nitrogen atoms, or a combination of one oxygen or sulfur atom and up to two nitrogen atoms, and their substituted as well as benzo- and pyrido-fused derivatives, for example, connected via one of the ring-forming carbon atoms. In certain embodiments, heteroaryl groups are optionally substituted with one or more substituents, independently selected from halo, hydroxy, amino, cyano, nitro, alkylamido, acyl, C_{1-6}-alkoxy, C_{1-6}-alkyl, C_{1-6}-hydroxyalkyl, C_{1-6}-aminoalkyl, C_{1-6}-alkylamino, alkylsulfenyl, alkylsulfinyl, alkylsulfonyl, sulfamoyl, or trifluoromethyl. Examples of heteroaryl groups include, but are not limited to, unsubstituted and mono- or di-substituted derivatives of furan, benzofuran, thiophene, benzothiophene, pyrrole, pyridine, indole, oxazole, benzoxazole, isoxazole, benzisoxazole, thiazole, benzothiazole, isothiazole, imidazole, benzimidazole, pyrazole, indazole, tetrazole, quinoline, isoquinoline, pyridazine, pyrimidine, purine and pyrazine, furazan, 1,2,3-oxadiazole, 1,2,3-thiadiazole, 1,2,4-thiadiazole, triazole, benzotriazole, pteridine, phenoxazole, oxadiazole, benzopyrazole, quinolizine, cinnoline, phthalazine, quinazoline and quinoxaline. In some embodiments, the substituents are halo, hydroxy, cyano, O-C_{1-6}-alkyl, C_{1-6}-alkyl, hydroxy-C_{1-6}-alkyl and amino-C_{1-6}-alkyl.

As used herein, the term "non-aromatic ring" refers to a ring that does not have a delocalized 4n+2 π-electron system.

As used herein, the term "cycloalkyl" refers to a group containing a non-aromatic ring wherein each of the atoms forming the ring is a carbon atom. Cycloalkyls can be formed by three, four, five, six, seven, eight, nine, or more than nine carbon atoms. Cycloalkyls can be optionally substituted. In certain embodiments, a cycloalkyl contains one or more unsaturated bonds. Examples of cycloalkyls include, but are not limited to, cyclopropane, cyclobutane, cyclopentane, cyclopentene, cyclopentadiene, cyclohexane, cyclohexene, 1,3-cyclohexadiene, 1,4-cyclohexadiene, cycloheptane and cycloheptene.

As used herein, the term "non-aromatic heterocycle" refers to a non-aromatic ring wherein one or more atoms forming the ring is a heteroatom. Non-aromatic heterocyclic rings can be formed by three, four, five, six, seven, eight, nine, or more than nine atoms. Non-aromatic heterocycles can be optionally substituted. In certain

embodiments, non-aromatic heterocycles contain one or more carbonyl or thiocarbonyl groups such as, for example, oxo- and thio-containing groups. Examples of non-aromatic heterocycles include, but are not limited to, lactams, lactones, cyclic imides, cyclic thioimides, cyclic carbamates, tetrahydrothiopyran, 4*H*-pyran, tetrahydropyran, piperidine, 1,3-dioxin, 1,3-dioxane, 1,4-dioxin, 1,4-dioxane, piperazine, 1,3-oxathiane, 1,4-oxathiin, 1,4-oxathiane, tetrahydro-1,4-thiazine, 2*H*-1,2-oxazine , maleimide, succinimide, barbituric acid, thiobarbituric acid, dioxopiperazine, hydantoin, dihydrouracil, morpholine, trioxane, hexahydro-1,3,5-triazine, tetrahydrothiophene, tetrahydrofuran, pyrroline, pyrrolidine, pyrrolidone, pyrrolidione, pyrazoline, pyrazolidine, imidazoline, imidazolidine, 1,3-dioxole, 1,3-dioxolane, 1,3-dithiole, 1,3-dithiolane, isoxazoline, isoxazolidine, oxazoline, oxazolidine, oxazolidinone, thiazoline, thiazolidine and 1,3-oxathiolane.

As used herein, the term "arylalkyl" alone or in combination, refers to an alkyl substituted with an aryl that can be optionally substituted.

As used herein, the term "heteroarylalkyl" alone or in combination, refers to an alkyl substituted with a heteroaryl that may be optionally substituted.

As used herein, the substituent "R" appearing by itself and without a number designation refers to a substituent selected from alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and non-aromatic heterocycle (bonded through a ring carbon).

As used herein, the term "O-carboxy" refers to a group of formula RC(=O)O-.

As used herein, the term "C-carboxy" refers to a group of formula -C(=O)OR.

As used herein, the term "acetyl" refers to a group of formula $-C(=O)CH_3$.

As used herein, the term "trihalomethanesulfonyl" refers to a group of formula $X_3CS(=O)_2$- where X is a halogen.

As used herein, the term "cyano" refers to a group of formula -CN.

As used herein, the term "isocyanato" refers to a group of formula -NCO.

As used herein, the term "thiocyanato" refers to a group of formula -CNS.

As used herein, the term "isothiocyanato" refers to a group of formula -NCS.

As used herein, the term "sulfinyl" refers to a group of formula -S(=O)-R.

As used herein, the term "S-sulfonamido" refers to a group of formula $-S(=O)_2NR$.

As used herein, the term "N-sulfonamido" refers to a group of formula $RS(=O)_2NH$-.

As used herein, the term "trihalomethanesulfonamido" refers to a group of formula $X_3CS(=O)_2NR$-.

As used herein, the term "O-carbamyl" refers to a group of formula -OC(=O)-NR.

As used herein, the term "N-carbamyl" refers to a group of formula ROC(=O)NH-.

As used herein, the term "O-thiocarbamyl" refers to a group of formula -OC(=S)-NR.

As used herein, the term "N-thiocarbamyl" refers to a group of formula ROC(=S)NH-.

As used herein, the term "C-amido" refers to a group of formula $-C(=O)-NR_2$.

As used herein, the term "N-amido" refers to a group of formula RC(=O)NH-.

As used herein, the term "ester" refers to a chemical moiety with formula $-(R)_n$-COOR', where R and R' are independently selected from alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and non-aromatic heterocycle (bonded through a ring carbon), where n is 0 or 1.

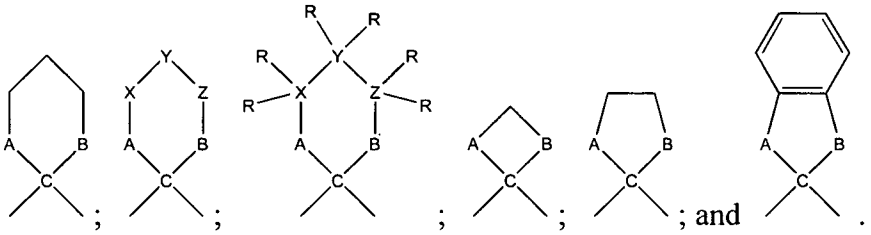
As used herein, the term "amide" refers to a chemical moiety with formula $-(R)_n$-C(O)NHR' or $-(R)_n$-NHC(O)R', where R and R' are independently selected from alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon), where n is 0 or 1. In certain embodiments, an amide can be an amino acid or a peptide.

As used herein, the terms "amine," "hydroxy," and "carboxyl" include such groups that have been esterified or amidified. Procedures and specific groups used to achieve esterification and amidification are known to those of skill in the art and can readily be found in reference sources such as Greene and Wuts, Protective Groups in Organic Synthesis, 3rd Ed., John Wiley & Sons, New York, NY, 1999, which is incorporated herein in its entirety.

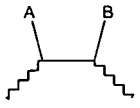
As used herein, the term "linked to form a ring" refers to instances where two atoms that are bound either to a single atom or to atoms that are themselves ultimately bound, are each bound to a linking group, such that the resulting structure forms a

ring. That resulting ring contains the two atoms that are linked to form a ring, the atom (or atoms) that previously linked those atoms, and the linker. For example, if A and B below are "linked to form a ring"

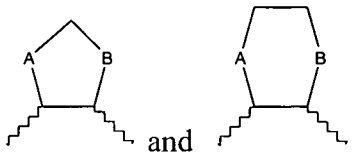
the resulting ring includes A, B, C, and a linking group. Unless otherwise indicated, that linking group can be of any length and can be optionally substituted. Referring to the above example, resulting structures include, but are not limited to:



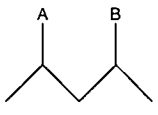
In certain embodiments, the two substituents that together form a ring are not immediately bound to the same atom. For example, if A and B, below, are linked to form a ring:



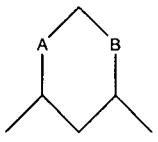
, the resulting ring contains A, B, the two atoms that already link A and B and a linking group. Examples of resulting structures include, but are not limited to:



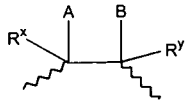
In certain embodiments, the atoms that together form a ring are separated by three or more atoms. For example, if A and B, below, are linked to form a ring:



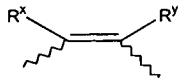
, the resulting ring contains A, B, the 3 atoms that already link A and B, and a linking group. An example of resulting structures include, but is not limited to:



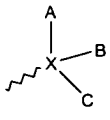
As used herein, the term "together form a bond" refers to the instance in which two substituents to neighboring atoms are null the bond between the neighboring atoms becomes a double bond. For example, if A and B below "together form a bond"



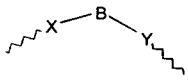
the resulting structure is:



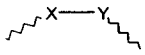
As used herein, the term "null" refers to a group that is absent. For example, in the structure:



, where X is C or N, if X is N, then one of A,B, or C is null. In instances where a substituent that is null is bound to more than one atom, it is intended that the atoms to which the null substituent are bound are instead bound directly. For example, in the structure:



, if B is null, then X and Y are directly bound. The resulting structure is:



.

Unless otherwise indicated, the term "optionally substituted," refers to a group in which none, one, or more than one of the hydrogen atoms has been replaced with one or more group(s) individually and independently selected from among cycloalkyl, aryl, heteroaryl, non-aromatic heterocycle, hydroxy, alkoxy, aryloxy, mercapto, alkylthio, arylthio, cyano, halo, carbonyl, thiocarbonyl, O-carbamyl, N carbamyl, O thiocarbamyl, N thiocarbamyl, C amido, N amido, S-sulfonamido, N sulfonamido, azido, diazo, imino, formylamino, fluoro, iodo, C trihalomethanesulfonyl, oxo, cyano, cyanato, carboxy, O carboxy, isocyanato, thiocyanato, isothiocyanato, nitro, silyl, and amino, including mono- and di-substituted amino groups, and the protected derivatives of amino groups. Such protective derivatives (and protecting groups that can form such protective derivatives) are known to those of skill in the art and can be found in

references such as Greene and Wuts, above. In embodiments in which two or more hydrogen atoms have been substituted, the substituent groups can together form a ring.

Throughout the specification, groups and substituents thereof can be chosen by one skilled in the field to provide stable moieties and compounds.

As used herein, the term "carrier" refers to a compound that facilitates the incorporation of another compound into cells or tissues. For example, dimethyl sulfoxide (DMSO) is a commonly used carrier for improving incorporation of certain organic compounds into cells or tissues.

As used herein, the term "pharmaceutical composition" refers to a chemical compound or composition capable of inducing a desired therapeutic effect in a subject. In certain embodiments, a pharmaceutical composition contains an active agent, which is the agent that induces the desired therapeutic effect. The pharmaceutical composition can contain a prodrug of the compounds provided herein. In certain embodiments, a pharmaceutical composition contains inactive ingredients, such as, for example, carriers and excipients.

As used herein, the term "therapeutically effective amount" refers to an amount of a pharmaceutical composition sufficient to achieve a desired therapeutic effect.

As used herein, a "prodrug" refers to a compound that is converted from a less active form into a corresponding more active form *in vivo*. In certain embodiments, upon *in vivo* administration, a prodrug is chemically converted to the biologically, pharmaceutically or therapeutically more active form of the compound. In certain embodiments, a prodrug is enzymatically metabolized by one or more steps or processes to the biologically, pharmaceutically or therapeutically active form of the compound. To produce a prodrug, a pharmaceutically active compound is modified such that the active compound will be regenerated upon in vivo administration. The prodrug can be designed to alter the metabolic stability or the transport characteristics of a drug, to mask side effects or toxicity, to improve the flavor of a drug or to alter other characteristics or properties of a drug. By virtue of knowledge of pharmacodynamic processes and drug metabolism *in vivo*, those of skill in this art, once a pharmaceutically active compound is known, can design prodrugs of the compound (see, *e.g.*, Nogrady (1985) *Medicinal Chemistry A Biochemical Approach*, Oxford University Press, New York, pages 388-392).

As used herein, the term "pharmaceutically acceptable" refers to a formulation of a compound that does not significantly abrogate the biological activity, a pharmacological activity and/or other properties of the compound when the formulated compound is administered to a subject. In certain embodiments, a pharmaceutically acceptable formulation does not cause significant irritation to a subject.

As used herein, pharmaceutically acceptable derivatives of a compound include, but are not limited to, salts, esters, enol ethers, enol esters, acetals, ketals, orthoesters, hemiacetals, hemiketals, acids, bases, solvates, hydrates or prodrugs thereof. Such derivatives can be readily prepared by those of skill in this art using known methods for such derivatization. The compounds produced can be administered to animals or humans without substantial toxic effects and either are pharmaceutically active or are prodrugs. Pharmaceutically acceptable salts include, but are not limited to, amine salts, such as but not limited to chloroprocaine, choline, N,N'-dibenzyl-ethylenediamine, ammonia, diethanolamine and other hydroxyalkylamines, ethylenediamine, N-methylglucamine, procaine, N-benzyl-phenethylamine, 1-para-chloro-benzyl-2-pyrrolidin-1'-ylmethylbenzimidazole, diethylamine and other alkylamines, piperazine and tris(hydroxymethyl)aminomethane; alkali metal salts, such as but not limited to lithium, potassium and sodium; alkali earth metal salts, such as but not limited to barium, calcium and magnesium; transition metal salts, such as but not limited to zinc; and other metal salts, such as but not limited to sodium hydrogen phosphate and disodium phosphate; and also including, but not limited to, salts of mineral acids, such as but not limited to hydrochlorides and sulfates; and salts of organic acids, such as but not limited to acetates, lactates, malates, tartrates, citrates, ascorbates, succinates, butyrates, valerates and fumarates. Pharmaceutically acceptable esters include, but are not limited to, alkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, cycloalkyl and heterocyclyl esters of acidic groups, including, but not limited to, carboxylic acids, phosphoric acids, phosphinic acids, sulfonic acids, sulfinic acids and boronic acids. Pharmaceutically acceptable enol ethers include, but are not limited to, derivatives of formula C=C(OR) where R is hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, cycloalkyl or heterocyclyl. Pharmaceutically acceptable enol esters include, but are not limited to, derivatives of formula C=C(OC(O)R) where R is hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, cycloalkyl or

heterocyclyl. Pharmaceutically acceptable solvates and hydrates are complexes of a compound with one or more solvent or water molecules, or 1 to about 100, or 1 to about 10, or one to about 2, 3 or 4, solvent or water molecules.

It is to be understood that the compounds provided herein can contain chiral centers. Such chiral centers can be of either the (R) or (S) configuration, or can be a mixture thereof. Thus, the compounds provided herein can be enantiomerically pure, or be stereoisomeric or diastereomeric mixtures.

As used herein, unit-dose forms as used herein refers to physically discrete units suitable for human and animal subjects and packaged individually as is known in the art. Each unit-dose contains a predetermined quantity of the therapeutically active compound sufficient to produce the desired therapeutic effect, in association with the required pharmaceutical carrier, vehicle or diluent. Unit dose forms can be administered in fractions or multiples thereof

As used herein, a multiple-dose form is a plurality of identical unit-dosage forms packaged in a single container to be administered in segregated unit-dose form. As used herein, a composition refers to any mixture of two or more products or compounds (*e.g.*, agents, modulators, regulators, etc.). It can be a solution, a suspension, liquid, powder, a paste, aqueous, non-aqueous formulations or any mixtures thereof.

As used herein, " a combination" refers to any association between two or more items or elements.

As used herein, an "article of manufacture" is a product that is made and sold and that includes a container and packaging, and optional instructions for use of the product. For purposes herein, articles of manufacture encompass a packaged androgen receptor modulating compound provided herein or pharmaceutically acceptable derivative thereof.

As used herein, a "kit" refers to a combination of an androgen receptor modulating compound provided herein or pharmaceutically acceptable derivative thereof and another item for a purpose including, but not limited to, administration, diagnosis, and assessment of an activity or property. Kits also optionally include instructions for use and/or reagents and glassware and other such items for use with the product.

As used herein, "substantially identical to a product" means sufficiently similar so that the property of interest is sufficiently unchanged so that the substantially identical product can be used in place of the product.

As used herein, the term "substantially pure" means sufficiently homogeneous to appear free of readily detectable impurities as determined by standard methods of analysis, such as thin layer chromatography (TLC), gel electrophoresis, high performance liquid chromatography (HPLC) and mass spectrometry (MS), used by those of skill in the art to assess such purity, or sufficiently pure such that further purification would not detectably alter the physical and chemical properties, such as enzymatic and biological activities, of the substance. Thus, substantially pure object species (*e.g.*, compound) is the predominant species present (*i.e.*, on a molar basis it is more abundant than any other individual species in the composition). In certain embodiments, a substantially purified fraction is a composition wherein the object species contains at least about 50 percent (on a molar basis) of all species present. In certain embodiments, a substantially pure composition will contain more than about 50%, 60%, 70%, 80%, 85%, 90%, 95%, or 99% of all species present in the composition. In certain embodiments, a substantially pure composition will contain more than about 80%, 85%, 90%, 95%, or 99% of all species present in the composition. Methods for purification of the compounds to produce substantially chemically pure compounds are known to those of skill in the art. A substantially chemically pure compound can, however, be a mixture of stereoisomers. In such instances, further purification might increase the specific activity of the compound. The instant disclosure is meant to include all such possible isomers, as well as, their racemic and optically pure forms. Optically active (+) and (-), (R)- and (S)-, or (D)- and (L)-isomers can be prepared using chiral synthons or chiral reagents, or resolved using conventional techniques, such as reverse phase HPLC. When the compounds described herein contain olefinic double bonds or other centers of geometric asymmetry, and unless specified otherwise, it is intended that the compounds include both E and Z geometric isomers. Likewise, all tautomeric forms also are intended to be included.

As used herein, the term "co-administer" refers to administering more than one pharmaceutical agent to a subject. In certain embodiments, co-administered

pharmaceutical agents are administered together in a single dosage unit. In certain embodiments, co-administered pharmaceutical agents are administered separately. In certain embodiments, co-administered pharmaceutical agents are administered at the same time. In certain embodiments, co-administered pharmaceutical agents are administered at different times.

As used herein, the term "subject" is an animal, typically a mammal, including human.

As used herein, the term "patient" includes human and animal subjects.

As used herein, the term "tissue-selective" refers to the ability of a compound to modulate an activity in one tissue to a greater or lesser degree than it modulates an activity in another tissue. The biological activities in the different tissues can be the same or they can be different. The biological activities in the different tissues can be mediated by the same type of target receptor. For example, in certain embodiments, a tissue-selective compound can modulate an androgen receptor mediated biological activity in one tissue and fail to modulate, or modulate to a lesser degree, an androgen receptor mediated biological activity in another tissue type.

As used herein, the term "monitoring" refers to observing an effect or absence of any effect. In certain embodiments, one monitors cells after contacting those cells with a compound provided herein. Examples of effects that can be monitored include, but are not limited to, changes in cell phenotype, cell proliferation, androgen receptor activity, or the interaction between an androgen receptor and a natural binding partner.

As used herein, the term "cell phenotype" refers to physical or biological characteristics. Examples of characteristics that constitute phenotype included, but are not limited to, cell size, cell proliferation, cell differentiation, cell survival, apoptosis (cell death), or the utilization of a metabolic nutrient (*e.g.*, glucose uptake). Certain changes or the absence of changes in cell phenotype are readily monitored using techniques known in the art.

As used herein, the term "contacting" refers to bringing two or more materials into close enough proximity that they can interact. In certain embodiments, contacting can be accomplished in a vessel such as, *e.g.*, a test tube or a petri dish. In certain embodiments, contacting can be performed in the presence of additional

materials. In certain embodiments, contacting can be performed in the presence of cells. In certain of such embodiments, one or more of the materials that are being contacted can be inside a cell. Cells can be alive or can be dead. Cells can or can not be intact.

B. Compounds

Compounds that interact with or bind to androgen receptors and/or modulate an activity of such receptors are provided. These receptors play a role in health (*e.g.*, normal growth, development, and/or absence of disease); hence compounds that modulate their activity can have therapeutic acitvity. In certain embodiments, selective androgen receptor modulators, binding compounds, and/or degrading compounds are provided; such compounds can be used for treating any of a variety of diseases or conditions.

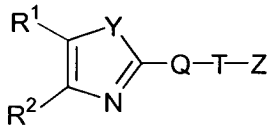
Receptor modulator compounds and potential receptor modulators, receptor reducing compounds and/or receptor degrading compounds are known. *See e.g.*, U. S. Patent Nos. 6,462,038, 5,693,646; 6,380,207; 6,506,766; 5,688,810; 5,696,133; 6,569,896, 6,673,799; 4,636,505; 4,097,578; 3,847,988; 6,861,432; 4,659,516; 6,566,372; 6,696,459; 6,017,924; U.S. Application Nos. 10/209,461 (Pub. No. US 2003/0055094), 10/758,582 (Pub No. US 2005/0085467), 10/493,013 (Pub. No. US 2004/0198717 A1); 10/080,926 (Pub No. US 2002/0183346); 10/080,503 (Pub No. US 2002/0183314); WO 01/27086; WO 02/22585; WO 2005/000795 A2; WO 2005/037206 A2; WO 05/018573; PCT US05/007867; Zhi *et al.*, *Bioorganic & Medicinal Chemistry Letters* 2000, *10*, 415-418; Pooley *et al.*, *J. Med. Chem.* 1998, *41*, 3461; Hamann *et al.*, *J. Med. Chem.* 1998, *41(4)*, 623; and Yin *et al.*, *Molecular Pharmacology*, 2003, 63 (1), 211-223.

In certain embodiments, the compounds provided herein are selective androgen receptor modulators. In certain embodiments, the compounds provided herein are selective androgen receptor binding compounds. In certain embodiments, the compounds provided herein are androgen receptor reducing compounds. In certain embodiments, the compounds provided herein are selective androgen receptor degrading compounds.

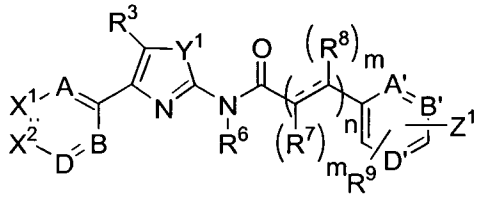
In certain embodiments, provided herein are methods of making and methods of using androgen receptor modulators, androgen binding compounds, and or

selective androgen receptor reducing compounds provided herein. In certain embodiments, selective androgen modulators are agonists, partial agonists, and/or antagonists for the androgen receptor.

Compounds provided herein, include those that have a structure selected from among Formula I or Formula II or Formula III or Formula IV:



(I)



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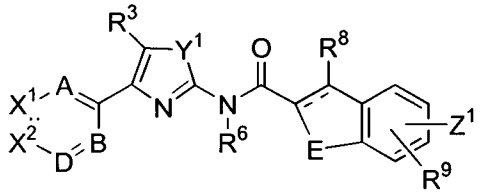
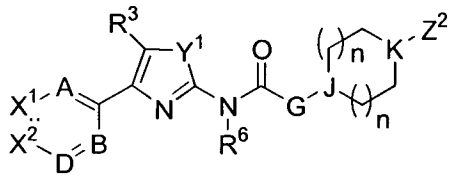


(III)



(IV)

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, R^1 is selected from among hydrogen, halogen, CN, NO_2, OR^C, NR^CR^D, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl.

In certain embodiments, R^2 is selected from among an optionally substituted monocyclic ring and an optionally substituted bicyclic ring system.

In certain embodiments, Y is selected from among NR^A, O and S.

In certain embodiments, R^A is selected from among hydrogen, OH, CN, NO_2, $(CH_2)_mR^B$, COR^C, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl.

In certain embodiments, R^B is selected from among an optionally substituted aryl and an optionally substituted heteroaryl.

In certain embodiments, R^C and R^D each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^C and R^D are linked to form a non-aromatic 4-8 member ring.

In certain embodiments, Q is selected from among an optionally substituted C_1-C_{10} alkyl, an optionally substituted C_1-C_{10} heteroalkyl, and an optionally substituted C_1-C_{10} haloalkyl.

In certain embodiments, T is an optionally substituted monocyclic 5-7 member ring or an optionally substituted bicyclic ring.

In certain embodiments, Z is selected from among hydrogen, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^B$, OR^C, NR^CR^D, $OCONR^CR^D$, $NR^CCO_2R^D$, NR^CCOR^D, $NR^CCONR^CR^D$, COR^C, CO_2R^C, $S(O)_mR^C$, $(CH_2)_mS(O)_mR^C$, $NR^CSO_2R^D$, $SO_2NR^CR^D$ and $CONR^CR^D$.

In certain embodiments, m is selected from among 0, 1 and 2.

In certain embodiments, R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, C_1-C_{10} heteroalkyl and C_1-C_{10} heterohaloalkyl. In certain embodiments, R^3 is selected from among hydrogen, halogen, OCH_3, C_1-C_6 alkyl and C_1-C_6 haloalkyl. In certain embodiments, R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5. In certain embodiments, R^3 is selected from among hydrogen, OCH_3 and CH_3.

In certain embodiments, R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring. In certain embodiments, R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, C_1-C_4 alkyl, C_1-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring. In certain embodiments, R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, CF_3 and C_1-C_4 alkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring. In certain embodiments, R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3, CH_3; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring.

In certain embodiments, R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl. In certain embodiments, R^6 is hydrogen or C_1-C_4 alkyl. In certain embodiments, R^6 is selected from among hydrogen, CH_3 and C_2H_5. In certain embodiments, R^6 is hydrogen.

In certain embodiments, R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring. In certain embodiments, R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl. In certain embodiments, R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl. In certain embodiments, R^7 and R^8 each independently is selected from among hydrogen, CF_3 and CH_3.

In certain embodiments, R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl. In certain embodiments, R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl. In certain embodiments, R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl. In certain embodiments, R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl.

In certain embodiments, R^a and R^b each independently is selected from among hydrogen, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, C_1-C_{10} heteroalkyl, C_1-C_{10} heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring. In certain embodiments, R^a and R^b each independently is selected from among C_1-C_8 alkyl, C_1-C_8 haloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring.

In certain embodiments, R^c is an optionally substituted aryl. In certain embodiments, R^c is an optionally substituted heteroaryl.

In certain embodiments, A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N. In certain embodiments, A, A′, B, B′, D and D′ each independently is CH or N. In certain embodiments, A, B, and D each independently is CH or N. In certain embodiments, A′, B′, and D′ are C.

In certain embodiments, E is selected from among S, O, NR^7, $-CH_2-$, CH_2CH_2-, $-CR^7=CR^8-$ and $-CR^7=N-$. In certain embodiments, E is selected from among S, O, NR^7 and $-CR^7=CR^7-$.

In certain embodiments, G is $-(CH_2)_{0-4}-$ or $-(CH=CH)_{1-2}-$. In certain embodiments, G is $-(CH_2)_{1-4}-$ or $-(CH=CH)_{1-2}-$.

In certain embodiments, J and K each independently is N or CH.

In certain embodiments, X^1 is N or CR^4 and X^2 is N or CR^5. In certain embodiments, X^1 is CR^4 and X^2 is CR^5.

In certain embodiments, Y^1 is NR^7 or S. In certain embodiments, Y^1 is NH or S.

In certain embodiments, Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring. In certain embodiments, Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring. In certain embodiments, Z^1 is selected from among C_1-C_6 heteroalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring.

In certain embodiments, Z^2 is the same as Z^1 when K is CH; or Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N. In certain embodiments, Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, $(CH_2)_mR^c$, $S(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N.

In certain embodiments, m is selected from 0, 1, and 2. In certain embodiments, m is 1 or 2.

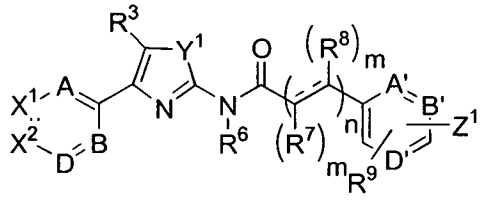
In certain embodiments, n is 0, 1 or 2. In certain embodiments, n is 1 or 2.

In certain embodiments of Formula II, if n = 0, then R^4 and R^5, and/or, Z^1 and R^9 are linked to form a nonaromatic ring.

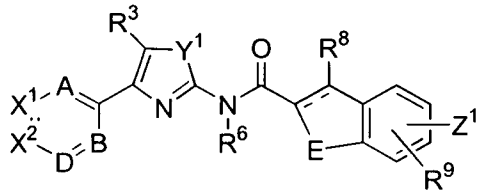
In certain embodiments of Formula II, if R^4 and R^5 are not linked to form a non-aromatic ring, n is 1, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

In certain embodiments of formula III, if R^4 and R^5 are not linked to form a non-aromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

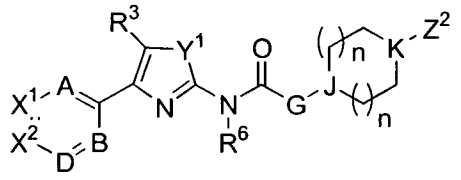
In certain embodiments, the compounds provided herein have a structure selected from among Formula II or Formula III or Formula IV:



(II)



(III)



(IV)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl and C_1-C_{10} heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, $-CH_2-$, CH_2CH_2-, $-CR^7=CR^8-$ and $-CR^7=N-$;

G is $-(CH_2)_{0-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

Z^2 is as same as Z^1 when K is CH; or Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

m is selected from among 0, 1, and 2;

n is selected from among 0, 1 and 2; and

the dotted lines indicate optional double bonds;

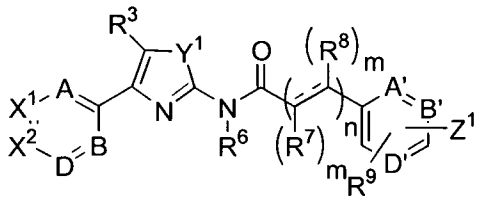
and pharmaceutically acceptable salts and prodrugs thereof;

provided that in formula II, when n = 0, then R^4 and R^5, and/or, Z^1 and R^9 are linked to form a nonaromatic ring;

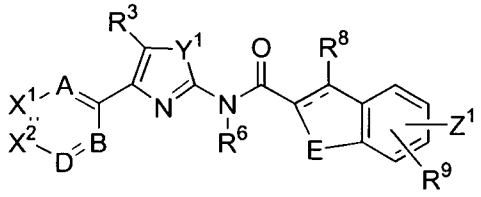
provided that in formula II, when R^4 and R^5 are not linked to form a nonaromatic ring, n is 1, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$;

provided that in formula III, when R^4 and R^5 are not linked to form a nonaromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

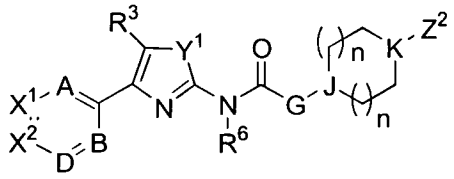
In certain embodiments, the compounds provided herein have a structure selected from among Formula II or Formula III or Formula IV:



(II)



(III)



(IV)

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, C_1-C_6 alkyl and C_1-C_6 haloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen or C_1-C_4 alkyl;

R^7 and R^8 are independently selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b each independently is selected from among C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^7-$;

G is $-(CH_2)_{0-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

Z^2 is the same as Z^1 when K is CH; or Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, $(CH_2)_mR^c$, $S(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

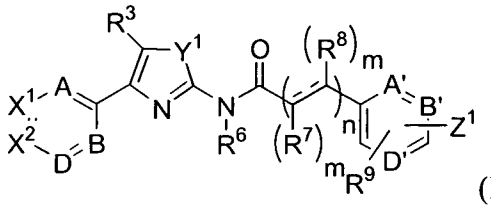
m is selected from among 0, 1, and 2;

n is 1 or 2; and

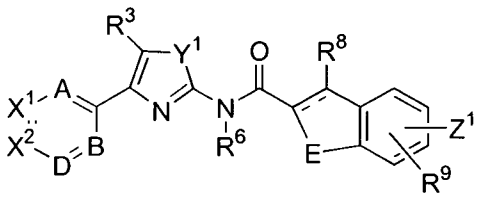
the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

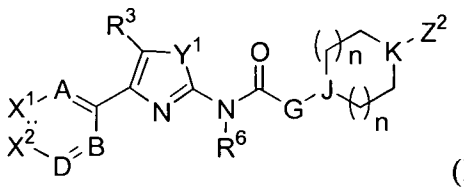
In certain embodiments, the compounds provided herein have a structure selected from among Formula II or Formula III or Formula IV:



(II)



(III)



(IV)

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, CF_3 and C_1-C_4 alkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, CH_3, C_2H_5;

R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is C_1-C_8 alkyl or C_1-C_8 haloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

A, B, and D each independently is CH or N;

A′, B′, and D′ are C;

E is selected from among S, O, NR^7, $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2;

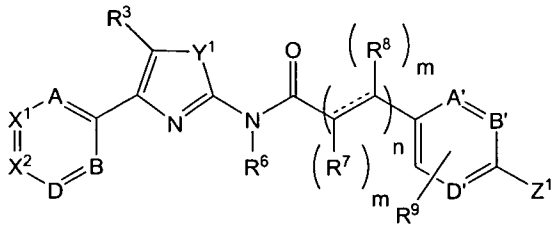
n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In some embodiments, R^3 is selected from among hydrogen, OCH_3 and CH_3; R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3, CH_3 or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring; R^6 is hydrogen; and R^7 and R^8 each independently is selected from among hydrogen, CF_3 and CH_3.

In certain embodiments, the compounds provided herein have a structure of Formula II:



(II)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2;

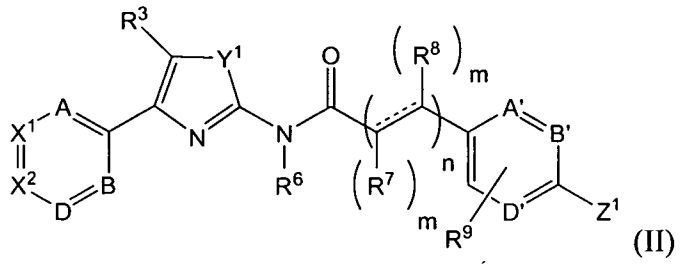
n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that when R^4 and R^5 are not linked to form a nonaromatic ring, and n is 1, and R^a and R^b are not linked to form a non-aromatic 5-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

In certain embodiments, the compounds provided herein have a structure of Formula II:



(II)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2;

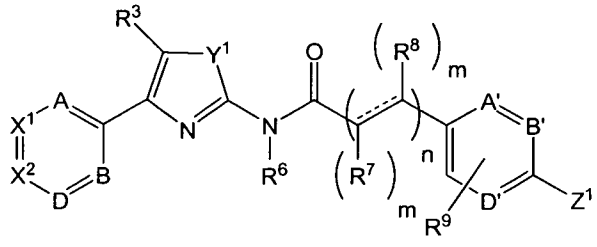
n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that when R^4 and R^5 are not linked to form a nonaromatic ring, and n is 1, and R^a and R^b are not linked to form a non-aromatic 5-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

In certain embodiments, the compounds provided herein have a structure of Formula II:



(II)

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, C_2-C_6 alkyl, C_2-C_6 haloalkyl and C_2-C_6 heteroalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, C_2-C_{10} alkyl and C_2-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen or C_1-C_4 alkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, C_1-C_{10} heteroalkyl, C_1-C_{10} heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

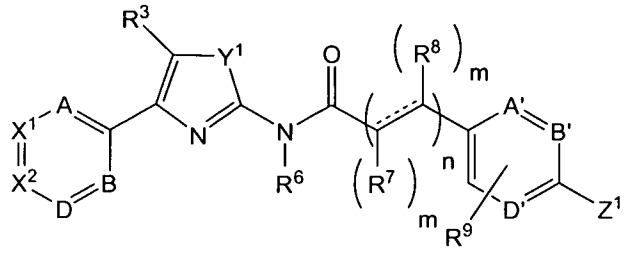
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula II:



(II)

wherein:

R^3 is selected from among hydrogen, OCH_3, C_3-C_6 alkyl, C_3-C_6 haloalkyl and C_3-C_6 heteroalkyl;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3, CHF_2, CH_2F, C_2-C_{10} alkyl and C_2-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen or C_2-C_4 alkyl;

R^7 and R^8 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3, CHF_2, CH_2F, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among halogen, OR^a, NR^aR^b, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_3-C_{10} alkyl, C_3-C_{10} haloalkyl, C_3-C_{10} heteroalkyl and C_3-C_{10} heterohaloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^1 is selected from among C_3-C_6 heteroalkyl, C_3-C_6 heterohaloalkyl, OR^a, NR^aR^b and $S(O)_mR^a$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

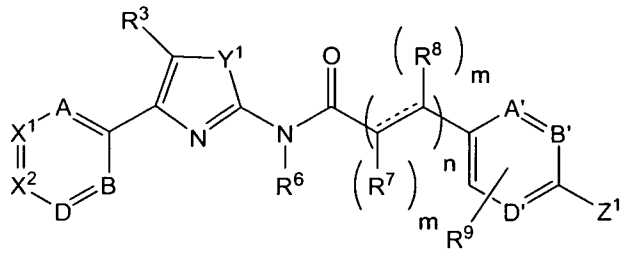
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula II:



(II)

wherein:

R^3 is hydrogen or halogen;

R^4 is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^5 is selected from among halogen, CN, NO_2 and C_1-C_4 heteroalkyl;

or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6, R^7 and R^8 are hydrogen;

R^9 is hydrogen or OR^a;

R^a and R^b each independently is selected from among hydrogen, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, C_1-C_{10} heteroalkyl, C_1-C_{10} heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from an optionally substituted aryl and an optionally substituted heteroaryl;

A, A′, B and B′ each independently is selected from CH and CR^9;

D is selected from among CH, CR^a and N;

D′ is CH or CR^9;

X^1 is CR^4;

X^2 is N or CR^5;

Y^1 is S or O;

Z^1 is selected from among halogen, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, $S(O)_mR^a$, $NR^aSO_2R^b$ and $NR^aCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

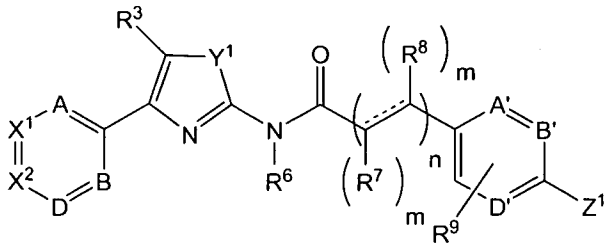
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula II:



(II)

wherein:

R^3 is hydrogen or halogen;

R^4 is selected from among halogen, OR^a, $SO_2NR^aR^b$, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, and C_1-C_{10} heteroalkyl;

R^5 is selected from among halogen, CN, NO_2 and C_1-C_{10} heteroalkyl;

or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6, R^7 and R^8 are hydrogen;

R^9 is hydrogen or OR^a;

R^a and R^b each independently is selected from among hydrogen, C_4-C_{10} alkyl, C_4-C_{10} haloalkyl, C_4-C_{10} heteroalkyl, C_4-C_{10} heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B and B′ each independently is CH or CR^9;

D is selected from among CH, CR^a and N;

D′ is CH or CR^9;

X^1 is CR^4;

X^2 is N or CR^5;

Y^1 is S;

Z^1 is selected from among halogen, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, $S(O)_mR^a$, $NR^aSO_2R^b$ and $NR^aCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

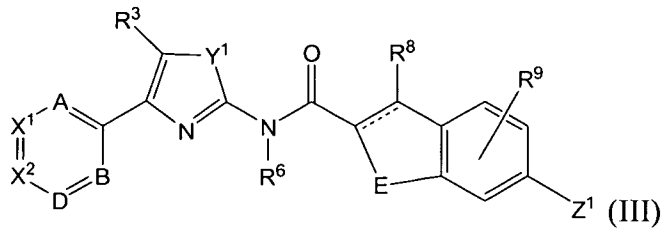
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula III:



(III)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, -CH_2-, CH_2CH_2-, -CR^7=CR^8-, -CR^7=N-;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2;

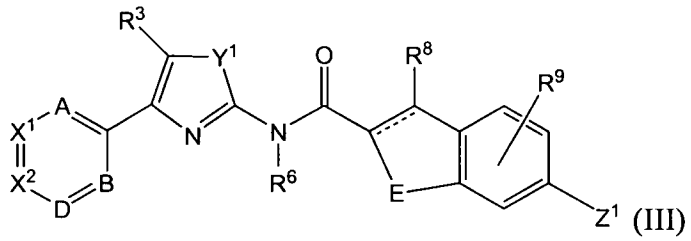
n is selected from among 0, 1 and 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that, when R^4 and R^5 are not linked to form a nonaromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

In certain embodiments, the compounds provided herein have a structure of Formula III:



(III)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b are each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from among an optionally substituted aryl and an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, $-CH_2-$, CH_2CH_2-, $-CR^7=CR^8-$, $-CR^7=N-$;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from 0, 1, and 2;

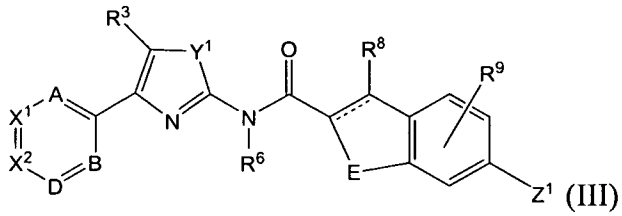
n is 0, 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that, when R^4 and R^5 are not linked to form a nonaromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a and $SO_2NR^aR^b$.

In certain embodiments, the compounds provided herein have a structure of Formula III:



(III)

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, C_1-C_6 alkyl and C_1-C_6 haloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen or C_1-C_4 alkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A', B, B', D and D' each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^7-$;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^a or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, COR^a, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2;

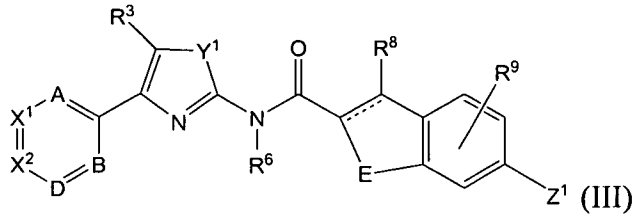
n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that, when R^4 and R^5 are not linked to form a nonaromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a.

In certain embodiments, the compounds provided herein have a structure of Formula III:



(III)

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, CF_3, CHF_2, CH_2F, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen, CH_3 or C_2H_5;

R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from among an optionally substituted aryl and an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ are each CH;

E is selected from among S, O, NR^7 and $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

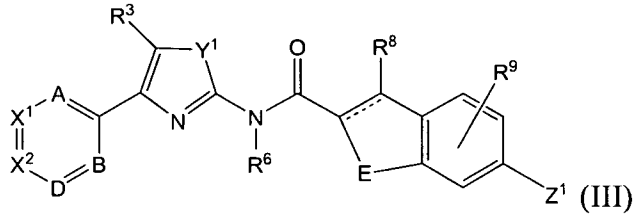
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula III:



(III)

wherein:

R^3 is selected from among halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OR^a, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen;

R^7 and R^8 each independently is selected from among hydrogen, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

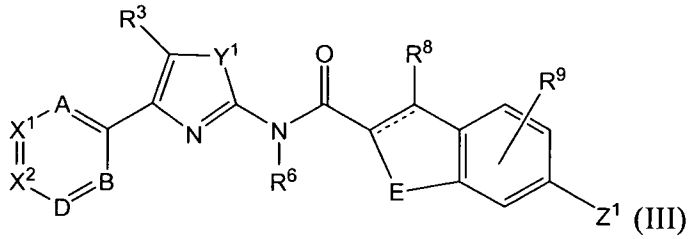
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula III:



(III)

wherein:

R^3 is selected from among halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OR^a, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen;

R^7 and R^8 each independently is selected from among hydrogen, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

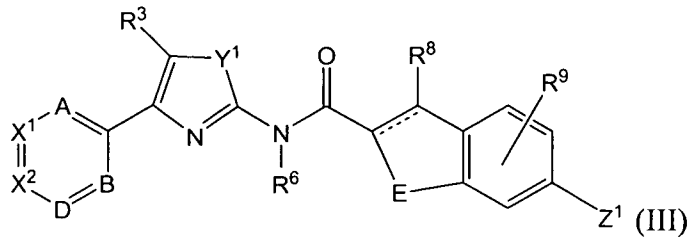
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula III:



(III)

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among OR^a, CF_3, CHF_2, CH_2F, C_1-C_{10} alkyl and C_1-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen, CH_3 or C_2H_5;

R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ are CH;

E is selected from among S, NR^7 and $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

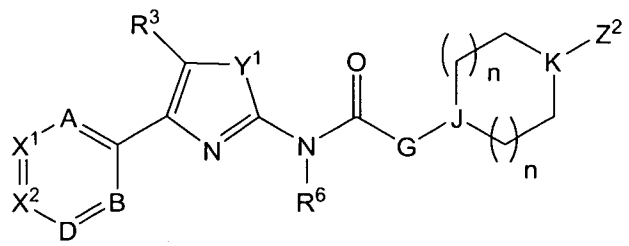
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted lines indicate optional double bonds;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula IV:



(IV)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_2-C_6 alkyl, C_2-C_6 haloalkyl, C_2-C_6 heteroalkyl and C_2-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_{10} haloalkyl and C_1-C_{10} heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, -CH_2-, CH_2CH_2-, -CR^7=CR^8-, -CR^7=N-;

G is -$(CH_2)_{1-4}$- or -$(CH{=}CH)_{1-2}$-;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^a or S;

Z^2 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$ when K is CH; or

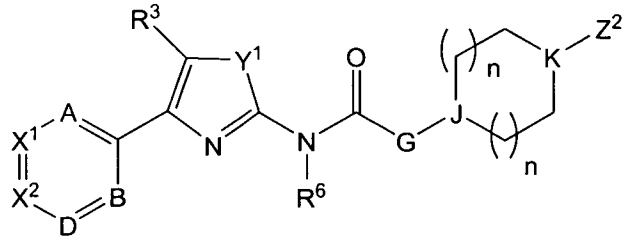
Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

m is selected from among 0, 1, and 2; and

n is selected from among 0, 1 and 2; and

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula IV:



(IV)

wherein:

R^3 is selected from among hydrogen, halogen, OR^a, C_2-C_6 alkyl and C_2-C_6 haloalkyl;

R^4 and R^5 each independently is selected from among CN, NO_2, OR^a, C_1-C_{10} alkyl and C_1-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl and an optionally substituted aryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from among an optionally substituted aryl and an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^7-$;

G is $-(CH_2)_{1-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^2 is selected from among C_1-C_6 heteroalkyl, OR^a, NR^aR^b, $S(O)_mR^a$, $NR^aSO_2R^b$ when K is CH; or

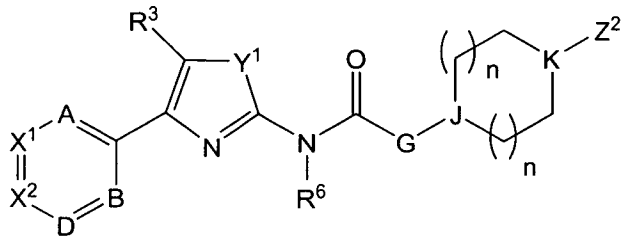
Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

m is selected from 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

In certain embodiments, the compounds provided herein have a structure of Formula IV:



(IV)

wherein:

R^3 is selected from hydrogen, halogen, OR^a, CF_3, CHF_2 and CH_2F;

R^4 and R^5 are independently selected from among F, OR^a, C_5-C_{10} alkyl and C_5-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b, C_1-C_{10} alkyl and C_1-C_{10} haloalkyl;

R^a and R^b are selected from hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl and C_1-C_8 heterohaloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

E is selected from S, O, NR^7 and $-CR^7=CR^7-$;

G is $-(CH_2)_{1-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^2 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$ when K is CH; or

Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, $(CH_2)_mR^c$, OR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$ and $SO_2NR^aR^b$ when K is N;

m is selected from 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

In embodiments in which two or more of a particular group are present, the identities of those two or more particular groups are selected independently and, thus, can be the same or different from one another. For example, certain compounds include two or more R^a groups. The identities of those two or more R^a groups are each selected independently. Thus, in certain embodiments, those R^a groups are all the same as one another; in certain embodiments, those R^a groups are all different from one another; and in certain embodiments, some of those R^a groups are the same as one another and some are different from one another. This independent selection applies to any group that is present in a compound more than once.

Certain compounds provided herein can exist as stereoisomers including optical isomers. The present disclosure is intended to include all stereoisomers and both the racemic mixtures of such stereoisomers as well as the individual enantiomers that can be separated according to methods that are known in the art.

In certain embodiments, a compound of Formula I-IV is a selective androgen receptor modulator. In certain embodiments, a compound of Formula I-IV is a selective androgen receptor agonist. In certain embodiments, a compound of Formula I-IV is a selective androgen receptor antagonist. In certain embodiments, a compound of Formula I-IV is a selective androgen receptor partial agonist. In certain embodiments, a compound of Formula I-IV is a tissue-selective selective androgen modulator. In certain embodiments, a compound of Formula I-

IV is a selective androgen receptor binding compound. In certain embodiments, a compound of Formula I-IV is a selective androgen receptor reducing compound. In certain embodiments, a compound Formula I-IV is a selective androgen receptor degrading compound. In certain embodiments, a compound of Formula I-IV is a selective androgen receptor antagonist having an AR antagonist efficacy at 10 mM of at least 80%, at least 85%, at least 90% or at least 95%.

Among the compounds are any selected from among:

N-[4-(4-Bromophenyl)thiazol-2-yl]-1-naphthamide (Compound 101);

N-[4-(4-Bromophenyl)thiazol-2-yl]-4-dipropylaminosulfonylbenzamide (Compound 102);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-dipropylaminosulfonylbenzamide (Compound 103);

N-[4-(3,4-Difluoro-phenyl)-thiazol-2-yl]-4-dipropylsulfamoyl-benzamide (Compound 104);

N-(4-(2-Naphthyl)thiazol-2-yl)-4-dipropylaminosulfonylbenzamide (Compound 105);

N-[4-(4-Bromophenyl)thiazol-2-yl]-4-*tert*-butylbenzamide (Compound 106);

N-[4-(4-Bromophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 107);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 108);

N-(4-(4-Methylphenyl)thiazol-2-yl)-4-diethylaminosulfonylbenzamide (Compound 109);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 110);

N-[4-(4-Cyanophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 111);

N-[4-(4-Nitrophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 112);

N-[4-(4-Cyanophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 113);

N-[4-(4-Pyridyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)propionamide (Compound 114);

N-[4-(3-Pyridyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)propionamide (Compound 115);

N-[4-(4-Acetylamino-3-nitrophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 116);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N-methyl-N-pentylaminosulfonyl)-benzamide (Compound 117);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N-methyl-N-hexylaminosulfonyl)-benzamide (Compound 118);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dibutylaminosulfonyl)-benzamide (Compound 119);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dipentylaminosulfonyl)-benzamide (Compound 120);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dihexylaminosulfonyl)-benzamide (Compound 121);

N-[4-(3-Methoxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 122);

N-[4-(2,4-Dimethoxyphenyl)-5-methylthiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)benzamide (Compound 123);

N-[4-(2,4-Dimethoxyphenyl)-5-methylthiazol-2-yl]-4-N-methyl-N-hexylamino-sulfonylphenyl)benzamide (Compound 124);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N',N'-dipropylaminocarbonyl-1,4-benzenedicarboxamide (Compound 125);

N-[4-(3-Hydroxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 126);

N-(4-(4-Pyridinyl)thiazol-2-yl)-4-dipropylaminosulfonylbenzamide (Compound 127);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-(4-dipropylaminosulfonylphenyl)-acrylamide (Compound 128);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N',N'-dibutylaminocarbonyl-1,4-benzene-dicarboxamide (Compound 129);

N-[4-(6-Methoxy-2-naphthyl)thiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)-benzamide (Compound 130);

N-[4-(2,4-Dimethoxyphenyl)thiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)-benzamide (Compound 131);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-(4-dipropylaminosulfonylphenyl)-2-methylacrylamide (Compound 132);

N-[4-(2-Fluoro-4-methoxyphenyl)thiazol-2-yl]-4-N-methyl-N-hexylamino-sulfonylphenyl)benzamide (Compound 133);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-phenylacrylamide (Compound 134);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 135);

N-[4-(2,4-Dimethoxyphenyl)thiazol-2-yl]-3-(4-N-methyl-N-hexylaminosulfonyl-phenyl)propionamide (Compound 136);

N-[4-(Diethylaminosulfonylphenyl)thiazol-2-yl]-4-nitro-3-trifluoromethyl-benzamide (Compound 137);

N-[4-(Dipropylaminosulfonylphenyl)thiazol-2-yl]-4-methoxybenzamide (Compound 138);

N-[4-Methoxyphenyl)thiazol-2-yl]-4-(4-dipropylaminosulfonylphenyl)-benzamide (Compound 139);

N-[4-Methoxyphenyl)thiazol-2-yl]-4-propylthiomethylbenzamide (Compound 140);

N-(4-(4-Methoxyphenyl)thiazol-2-yl)-4-cyclohexymethoxybenzamide (Compound 141);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-diethylaminosulfonyl-phenyl)propionamide (Compound 142);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-dipropylaminosulfonyl-phenyl)propionamide (Compound 143);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-N,N-bisisopropyl-aminosulfonylphenyl)propionamide (Compound 144);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-N-methyl-N-hexyl-aminosulfonylphenyl)propionamide (Compound 145);

(±)-N-(2-Tetrahydropyrano)oxa-3(E)-(4-(4-(4-methoxyphenyl)thiazol-2-yl)-amino-carbonylphenyl)acrylamide (Compound 146);

(±)-N-(4-Methoxyphenyl)thiazol-2-yl)-3(E)-(4-(2-tetrahydropyrano)oxa-aminocarbonyl-phenyl)acrylamide (Compound 147) ;

N-(4-Methoxyphenyl)thiazol-2-yl)-4-(6-indano)carbonylbenzamide (Compound 148) ;

N-(4-(4-Methoxyphenyl)-2-thiazolyl)-N'-(4-cyclohexylmethylaminosulfonyl)-phenylurea (Compound 149);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(3-methoxypropyl)aminosulfonyl-phenyl)propionamide (Compound 150);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-trifluoromethyl-3-(4-dipropylamino-sulfonylphenyl)acrylamide (Compound 151);

N-[4-(2-Oxo-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-4-diethylaminosulfonyl-benzamide (Compound 152);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonyl-phenyl)propionamide (Compound 153);

N-[4-(3,4-Dihydro-3-oxo-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-3-(4-dipropyl-amino-sulfonylphenyl)propionamide (Compound 154);

N-[4-(2,3-Dihydro-2-oxobenzoxazin-6-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonyl-phenyl)propionamide (Compound 155);

N-[4-(3-Oxo-3,4-dihydro-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-4-(1-piperidine-sulfonyl)benzamide (Compound 156);

N-[4-(2-Oxo-2,3-dihydrobenzooxazol-6-yl)thiazol-2-yl]-4-(1-piperidinesulfonyl)-benzamide (Compound 157);

N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropyl-amino-sulfonylphenyl)propionamide (Compound 158);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipropylaminosulfonyl-benzamide (Compound 159);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 160);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(N-methyl-N-hexylamino)-sulfonylbenzamide (Compound 161);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dibutylamino)sulfonyl-benzamide (Compound 162);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipentylamino)sulfonyl-benzamide (Compound 163);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylthiophenyl)acrylamide (Compound 164);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylthiophenyl)acrylamide (Compound 165);

N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3(E)-(4-dipropyl-amino)sulfonylacrylamide (Compound 166);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 167);

N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino)-sulfonylpropionamide (Compound 168);

N-[4-(1,3-Benzodioxol-5-yl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 169);

N-[4-Phenyl-2-thiazolyl]-3(E)-(4-acetylamino)phenylacrylamide (Compound 170);

N-[4-(2,3-Dihydro-5-benzofuranyl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 171);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylsulfonylphenyl)-acrylamide (Compound 172);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfoxidephenyl)-acrylamide (Compound 173);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylphenyl)-propionamide (Compound 174);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylthiophenyl)acrylamide (Compound 175);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-nonanylthiophenyl)acrylamide (Compound 176);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)thiophenyl)-acrylamide (Compound 177);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylthiophenyl)propionamide (Compound 178);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylthiophenyl)-acrylamide (Compound 179);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropyl)thiophenyl)-acrylamide (Compound 180);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allylthiophenyl)acrylamide (Compound 181);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylthiophenyl)acrylamide (Compound 182);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylsulfonylphenyl)acrylamide (Compound 183);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylbenzyl)thiophenyl)-acrylamide (Compound 184);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-thiophenyl)acrylamide (Compound 185);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylsulfonyl-phenyl)acrylamide (Compound 186);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropylsulfonyl-phenyl)acrylamide (Compound 187);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylthio-phenyl)-acrylamide (Compound 188);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(2-(1-piperidinyl)ethoxy)-benzamide (Compound 189);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-trifluoroacetylaminophenyl)-propionamide (Compound 190);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-octylsulfonylaminophenyl)-propionamide (Compound 191);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylaminophenyl)-propionamide (Compound 192);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-propylsulfonylamino-phenyl)propionamide (Compound 193);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-butylsulfonylamino-phenyl)propionamide (Compound 194);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-octylsulfonylamino-phenyl)propionamide (Compound 195);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-bis-(2-hydroxyethyl)-aminosulfonylphenyl)propionamide (Compound 196);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloroethyl)aminocarbonylamino-phenyl)propionamide (Compound 197);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-butylaminocarbonylaminophenyl)-propionamide (Compound 198);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-ethylaminocarbonylaminophenyl)-propionamide (Compound 199);

N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-trifluoromethyl-4-nitrobenzamide (Compound 200);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N-propyl-3(E)-(4-propyloxyphenyl)-acrylamide (Compound 201);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-aminophenyl)acrylamide (Compound 202);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 203);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-dipropylaminosulfonyl-phenyl)acrylamide (Compound 204);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthiophenyl)-acrylamide (Compound 205);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylsulfonylphenyl)-acrylamide (Compound 206);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylsulfonylphenyl)acrylamide (Compound 207);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 208);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 209);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methoxyphenyl)methyl-sulfonylphenyl)acrylamide (Compound 210);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylaminocarbonylamino)-phenylacrylamide (Compound 211);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-hydroxyphenyl)acrylamide (Compound 212);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 213);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylphenyl)methyl-sulfonylphenyl)acrylamide (Compound 214);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylphenyl)-methylsulfonylphenyl)acrylamide (Compound 215);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylsulfonyl-phenyl)acrylamide (Compound 216);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonyl-phenyl)acrylamide (Compound 217);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxypropyl)-sulfonylphenyl)-acrylamide (Compound 218);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)-sulfonylphenyl)-acrylamide (Compound 219);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylsulfonylphenyl)-acrylamide (Compound 220);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylmethylphenyl)-acrylamide (Compound 221);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)thiophenyl)-acrylamide (Compound 222);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxyethyl)sulfonyl-phenyl)acrylamide (Compound 223);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methoxyphenyl)acrylamide (Compound 224);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butoxyphenyl)acrylamide (Compound 225);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethyloxy)phenyl)-acrylamide (Compound 226);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 227);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-thienyl)methylthiophenyl)-acrylamide (Compound 228);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methylthio-phenyl)acrylamide (Compound 229);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methylsulfonyl-phenyl)acrylamide (Compound 230);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-isopropylphenyl)methylsulfonyl-phenyl)acrylamide (Compound 231);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 232);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyloxy)phenyl)-acrylamide (Compound 233);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylthiophenyl)-methoxy-phenyl)acrylamide (Compound 234);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethoxyphenyl)-methoxyphenyl)acrylamide (Compound 235);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorophenyl)-methoxy-phenyl)acrylamide (Compound 236);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 237);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(6-fluoro-1,3-benzodioxan-8-yl)-methoxyphenyl)acrylamide (Compound 238);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonylphenyl)-acrylamide (Compound 239);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexyethyl)sulfonylphenyl)-acrylamide (Compound 240);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-sulfonylphenyl)acrylamide (Compound 241);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,2-dihydro-5-benzofuranyl)-acrylamide (Compound 242);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,4-benzodioxan-6-yl)acrylamide (Compound 243);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-1,1,2,3,3,3-pentafluoropropyloxyphenyl)acrylamide (Compound 244);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-isopropyloxy-4-ethoxyphenyl)acrylamide (Compound 245);

N-[4-(2-Oxo-2,3-dihydrobenzoxazol-6-yl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)sulfonylphenyl)acrylamide (Compound 246);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-fluorophenyl)methoxyphenyl)acrylamide (Compound 247);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-propyloxyphenyl)-acrylamide (Compound 248);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthiophenyl)-acrylamide (Compound 249);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(5-benzo-1,3-dioxolyl)acrylamide (Compound 250);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonyl)phenyl-acrylamide (Compound 251);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 252);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-furanylmethyl)thiophenyl)-acrylamide (Compound 253);

N-(3-Isoxazolyl)-3(E)-[4-(1,4-benzodioxan-6-yl)thiazol-2-yl]aminocarbonyl-phenylacrylamide (Compound 254);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 255);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 256);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)-methoxyphenyl)acrylamide (Compound 257);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)-methoxyphenyl)propionamide (Compound 258);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(8-methoxy-1,4-benzodioxan-6-yl)-acrylamide (Compound 259);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)-phenyl)acrylamide (Compound 260);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 261);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(8-methoxy-1,4-benzodioxan-6-yl)-propionamide (Compound 262);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 263);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 264);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 265);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 266);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-ethoxyphenyl)-acrylamide (Compound 267);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3,4-diethoxyphenyl)propionamide (Compound 268);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 269);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 270);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 271);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 272);

N-[4-(3-Pyridyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 273);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 274);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 275);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 276);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 277);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 278);

N-[4-(3-Pyridyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 279);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylaminosulfonyl-phenyl)-3-trifluoromethylacrylamide (Compound 280);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 281);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylaminosulfonyl-phenyl)-3-trifluoromethylacrylamide (Compound 282);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 283)

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoro-methylacrylamide (Compound 284);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoro-methylacrylamide (Compound 285);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 286);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoro-methylacrylamide (Compound 287);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoro-methylacrylamide (Compound 288);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethyl-acrylamide (Compound 289);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoro-methylacrylamide (Compound 290);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoro-methylacrylamide (Compound 291);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoro-propyloxy)phenyl)acrylamide (Compound 292);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-pyridylmethoxy)phenyl)-acrylamide (Compound 293);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-pyridylmethylsulfonyl)-phenyl)-acrylamide (Compound 294);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propyloxyphenyl)acrylamide (Compound 295);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-propyloxyphenyl)acrylamide (Compound 296);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-butyloxyphenyl)acrylamide (Compound 297);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-cyclohexymethoxyphenyl)-acrylamide (Compound 298);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4,4,4-trifluorobutyloxy)-phenyl)acrylamide (Compound 299);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4,4,4-trifluorobutyloxy)-phenyl)acrylamide (Compound 300);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-trifluoromethoxyphenyl)-acrylamide (Compound 301);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2-hydroxy-3,3,3-trifluoro-propyloxy)phenyl)acrylamide (Compound 302);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 303);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 304);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 305);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 306);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 307);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(3-methylbutoxy)phenyl)-acrylamide (Compound 308);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 309);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4-methylpentyloxy)phenyl)-acrylamide (Compound 310);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylbutoxy)phenyl)-acrylamide (Compound 311);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylpentyloxy)phenyl)-acrylamide (Compound 312);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 313);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-dipropylaminophenyl)-propionamide (Compound 314);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-propylaminophenyl)-propionamide (Compound 315);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-(2,2-difluoroethyl)-3-(4-amino-phenyl)propionamide (Compound 316);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2,2-trifluoroethoxy)phenyl)-acrylamide (Compound 317);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 318);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 319);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 320);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 321);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 322);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 323)

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-cyclohexymethoxyphenyl)-acrylamide (Compound 324);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-propyloxyphenyl)acrylamide (Compound 325);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 326);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-methylbutyloxy)phenyl)-acrylamide (Compound 327);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 328);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2,2,2-trifluoroethylamino)-phenyl)propionamide (Compound 329);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2,2-trifluoroethyl)-aminophenyl)propionamide (Compound 330);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-benzyloxyphenyl)-acrylamide (Compound 331);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 332);

N-[4-(4-Methoxyphenyl)imidazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 333);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(2,2-difluoro-1,3-benzodioxol-5-yl)-propionamide (Compound 334);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-benzyloxyphenyl)-propionamide (Compound 335);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2-chloro-2,2-difluoro-ethyl)aminophenyl)propionamide (Compound 336);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloro-2,2-difluoroethyl)-aminophenyl)propionamide (Compound 337);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)acrylamide (Compound 338);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(5,5,6,6,6-pentafluorohexyl)-aminophenyl)acrylamide (Compound 339);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)-propionamide (Compound 340);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(2,2-difluoro-ethoxy)phenyl)acrylamide (Compound 341);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoro-propyl)sulfonylphenyl)acrylamide (Compound 342);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyl)sulfonyl-phenyl)acrylamide (Compound 343);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-propylsulfonylamino-6-naphthamide (Compound 344);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiophene-amide (Compound 345);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-fluoro-2-benzofuranamide (Compound 346);

N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 347);

N-[4-(4-Pyridyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 348);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylthio-2-benzofuranamide (Compound 349);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonyl-2-benzofuranamide (Compound 350);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(2-furanyl)methylthio-2-benzo-furanamide (Compound 351);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-5,6,7,8-tetrahydro-5,8-dioxa-thiopheno[2,3-b]naphthalene-2-amide (Compound 352);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5,6,7,8-tetrahydro-5,8-dioxathio-pheno[2,3-*b*]-naphthalene-2-amide (Compound 353);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methyl-2-thiopheneamide (Compound 354);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methoxy-2-thiopheneamide (Compound 355);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-trifluoromethyl-2-thiopheneamide (Compound 356);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-octylsulfonyl)piperidinyl)-acetamide (Compound 357);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-butylsulfonyl)piperidinyl)-acetamide (Compound 358);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 359);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-octylsulfonyl)piperidinyl)-butamide (Compound 360);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-butylsulfonyl)piperidinyl)-butamide (Compound 361);

N-[4-(2,3-Dihydro-2-oxo-1,4-benzoxazin-7-yl)thiazol-2-yl]-4-(4-(4-octyl-sulfonyl)piperidinyl)butamide (Compound 362);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 363);

N-[4-(4-Fluoro-4-methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)-acetamide (Compound 364);

N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)acetamide (Compound 365);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-bromophenyl)acrylamide (Compound 366);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N-2,2,2-trifluoroethyl-N-5,5,6,6,6-pentafluorohexylaminophenyl)propionamide (Compound 367);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)acrylamide (Compound 368);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 369);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-trifluoromethyl-3-(4-cyclo-hexylmethoxyphenyl)acrylamide (Compound 370);

N-[4-(4-Cyanophenyl)thiazol-2-yl]-3(E)-(4-(3-fluoro)-benzyloxyphenyl)-acrylamide (Compound 371);

N-[4-(4-Nitrophenyl)thiazol-2-yl]-3(E)-(1-allyloxyphenyl)acrylamide (Compound 372);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexylmethoxyphenyl)acrylamide (Compound 373);

N-[4-Methoxyphenyl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexyl-methoxy-phenyl)acrylamide (Compound 374);

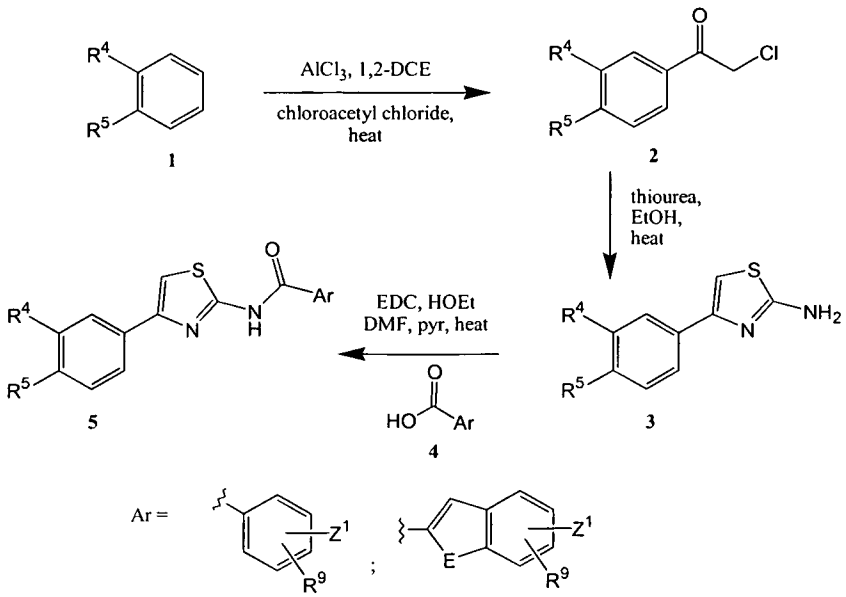
and pharmaceutically acceptable salts and prodrugs thereof.

Certain compounds provided herein can exist as stereoisomers including optical isomers. The present disclosure is intended to include all stereoisomers and both the racemic mixtures of such stereoisomers as well as the individual enantiomers that can be separated according to methods that are known in the art.

C. Preparation of the compounds

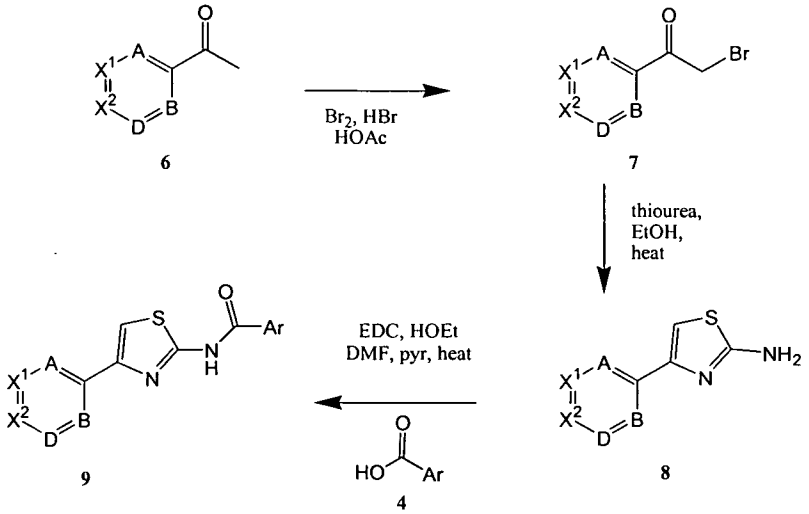
In certain embodiments, of the compounds provided herein can be synthesized using the following synthesis schemes. In each of the Schemes the R groups correspond to the definitions described above.

Scheme I



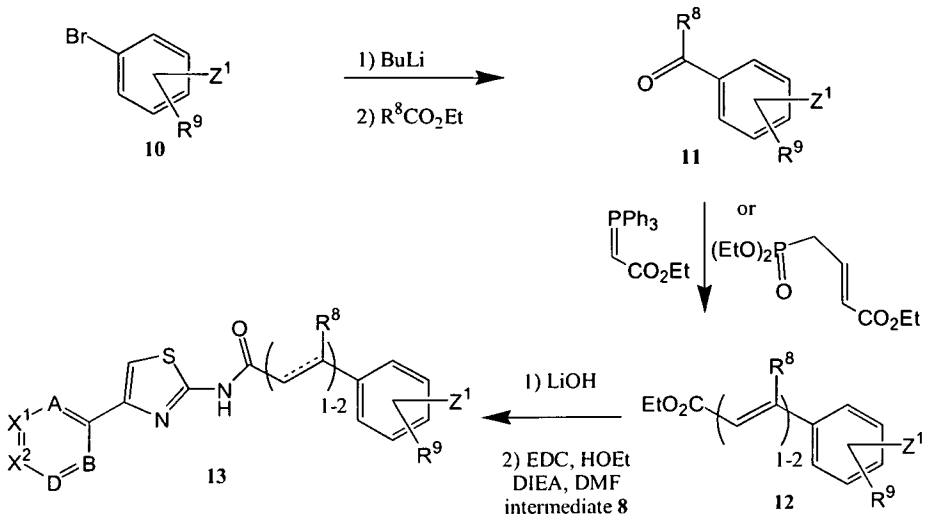
The process of Scheme I is a multi-step synthetic sequence that commences with the Freidel-Crafts acylation of an aromatic of structure **1** to form the acylated structure **2**. This is then heated in ethanol with thiourea to form the aminothiazole of structure **3**. This amine is then coupled to the appropriate carboxylic acid of structure **4** using standard peptide coupling conditions to form the final product of structure **5**.

Scheme II



The process of Scheme II is a multi-step synthetic sequence that commences with the reaction of an arylacetyl of structure **6** with bromine, in HBr and acetic acid to afford a salt of structure **7**. This HBr salt was condensed with thiourea by heating in ethanol to afford the aminothiazole of structure **8**. This is then coupled to the carboxylic acid 4 using standard peptide coupling conditions to form the final product of structure **9**.

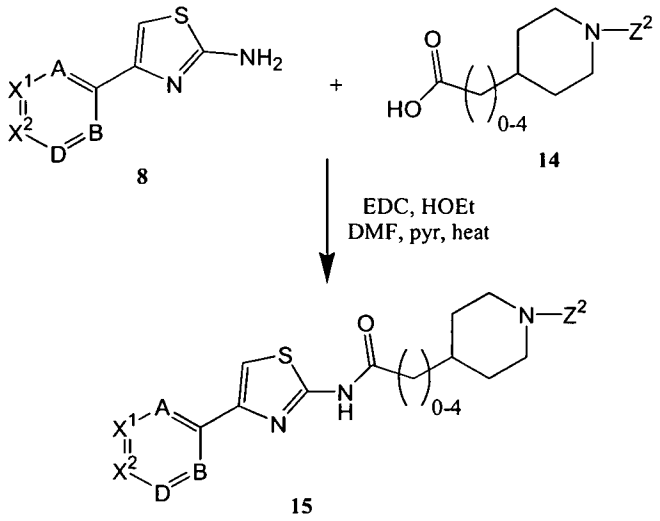
Scheme III



The process of Scheme III is a multi-step synthetic sequence that commences with lithiation of bromides of structure **10** to generate ketones of structure **11**. Wittig olefination of compounds **11** provides either the acrylates or the pentadienoates of structure **12**. Hydrolysis of the esters (**12**) followed by coupling with intermediate **8** in Scheme II affords the amide compounds of structure **13**. A saturated version of the

products can be also prepared from hydrogenation of intermediate **12** before the amide coupling reaction.

Scheme IV



Scheme IV describes the synthesis of compounds of structure **15**. Molecules of intermediate **8** are prepared according to the methods in Schemes I and II. Compounds of intermediate **14** are commercially available or prepared by known methods disclosed in the literature. The coupling reaction of intermediates **8** and **14** provides amide products of structure **15**.

D. Certain Indications

In certain embodiments, compounds and/or compositions provided herein are useful in the prevention, treatment, or amelioration of one or more of the symptoms of diseases or disorders associated with androgen receptor activity. Such prevention, treatment, or amelioration of diseases or disorders include, but are not limited to, maintenance of muscle strength and function (*e.g.*, in the elderly); reversal or prevention of frailty or age-related functional decline ("ARFD") in the elderly (*e.g.*, sarcopenia); treatment of catabolic side effects of glucocorticoids; prevention and/or treatment of reduced bone mass, density or growth (*e.g.*, osteoporosis and osteopenia); treatment of chronic fatigue syndrome (CFS); chronic myalgia; treatment of acute fatigue syndrome and muscle loss following elective surgery (*e.g.*, post-surgical rehabilitation); accelerating of wound healing; accelerating bone fracture repair (such as accelerating the recovery of hip fracture patients); accelerating healing of complicated fractures, *e.g.* distraction osteogenesis; in joint replacement; prevention of

post-surgical adhesion formation; acceleration of tooth repair or growth; maintenance of sensory function (*e.g.*, hearing, sight, olefaction and taste); treatment of periodontal disease; treatment of wasting secondary to fractures and wasting in connection with chronic obstructive pulmonary disease (COPD), chronic liver disease, AIDS, weightlessness, cancer cachexia, burn and trauma recovery, chronic catabolic state (*e.g.*, coma), eating disorders (*e.g.*, anorexia) and chemotherapy; treatment of cardiomyopathy; treatment of thrombocytopenia; treatment of growth retardation in connection with Crohn's disease; treatment of short bowel syndrome; treatment of irritable bowel syndrome; treatment of inflammatory bowel disease; treatment of Crohn's disease and ulcerative colitis; treatment of complications associated with transplantation; treatment of physiological short stature including growth hormone deficient children and short stature associated with chronic illness; treatment of obesity and growth retardation associated with obesity; treatment of anorexia (*e.g.*, associated with cachexia or aging); treatment of hypercortisolism and Cushing's syndrome; Paget's disease; treatment of osteoarthritis; treatment of osteochondrodysplasias; induction of pulsatile growth hormone release; treatment of depression, nervousness, irritability and stress; treatment of reduced mental energy and low self-esteem (*e.g.*, motivation/ assertiveness); improvement of cognitive function (*e.g.*, the treatment of dementia, including Alzheimer's disease and short term memory loss); treatment of catabolism in connection with pulmonary dysfunction and ventilator dependency; treatment of cardiac dysfunction (*e.g.*, associated with valvular disease, myocardial infarction, cardiac hypertrophy or congestive heart failure); lowering blood pressure; protection against ventricular dysfunction or prevention of reperfusion events; treatment of adults in chronic dialysis; reversal or slowing of the catabolic state of aging; attenuation or reversal of protein catabolic responses following trauma (*e.g.*, reversal of the catabolic state associated with surgery, congestive heart failure, cardiac myopathy, burns, cancer, COPD etc.); reducing cachexia and protein loss due to chronic illness such as cancer or AIDS; treatment of hyperinsulinemia including nesidioblastosis; treatment of immuno-suppressed subjects; treatment of wasting in connection with multiple sclerosis or other neurodegenerative disorders; promotion of myelin repair; maintenance of skin thickness; treatment of metabolic homeostasis and renal homeostasis (*e.g.*, in the frail elderly); stimulation of osteoblasts, bone remodeling and cartilage growth; regulation

of food intake; treatment of insulin resistance, including NIDDM, in mammals (*e.g.*, humans); treatment of insulin resistance in the heart; improvement of sleep quality and correction of the relative hyposomatotropism of senescence due to high increase in REM sleep and a decrease in REM latency; treatment of hypothermia; treatment of congestive heart failure; treatment of lipodystrophy (*e.g.*, in subjects taking HIV or AIDS therapies such as protease inhibitors); treatment of muscular atrophy (*e.g.*, due to physical inactivity, bed rest or reduced weight-bearing conditions); treatment of musculoskeletal impairment (*e.g.*, in the elderly); improvement of the overall pulmonary function; treatment of sleep disorders; and the treatment of the catabolic state of prolonged critical illness; treatment of hirsutism, acne, seborrhea, androgenic alopecia, anemia, hyperpilosity, benign prostate hypertrophy, adenomas and neoplasies of the prostate (*e.g.*, advanced metastatic prostate cancer) and malignant tumor cells containing the androgen receptor, such as is the case for breast, brain, skin, ovarian, bladder, lymphatic, liver and kidney cancers; cancers of the skin, pancreas, endometrium, lung and colon; osteosarcoma; hypercalcemia of malignancy; metastatic bone disease; treatment of spermatogenesis, endometriosis and polycystic ovary syndrome; counteracting preeclampsia, eclampsia of pregnancy and preterm labor; treatment of premenstrual syndrome; treatment of vaginal dryness; age related decreased testosterone levels in men, hypogonadism, male menopause, male hormone replacement, male and female sexual dysfunction (*e.g.*, erectile dysfunction, decreased sex drive, sexual well-being, decreased libido), male and female contraception, hair loss, Reaven's Syndrome and the enhancement of bone and muscle performance/strength.

In certain instances, prostate cancer is dependant on androgens. Such androgen dependent prostate cancer is typically amenable to treatment by androgen receptor antagonists and/or androgen receptor partial agonists. In certain instances, prostate cancer is androgen independent. In such instances, androgen receptor antagonists are less effective or completely ineffective. However, in certain instances, androgen independent prostate cancer is androgen receptor dependant. In such instances, androgen receptor reducing compounds, including, but not limited to, androgen receptor degrading compounds can provide effective treatment. See *e.g.*, U.S. 6,861,432.

In certain embodiments, compounds and/or compositions provided herein are therapeutically effective for treating prostate cancer. In certain such embodiments, the prostate cancer is androgen dependant prostate cancer. In certain embodiments, the prostate cancer is androgen independent prostate cancer. In certain embodiments, the prostate cancer is androgen independent, but androgen receptor dependant prostate cancer. In certain such embodiments, administration of compounds and/or compositions provided herein results in a decrease in the amount of functional androgen receptor present in cells. In certain embodiments, administration of compositions provided herein results in degradation of androgen receptors.

E. Formulation of Pharmaceutical Compositions

The pharmaceutical compositions provided herein contain therapeutically effective amounts of one or more of the androgen receptor activity modulators provided herein that are useful in the prevention, treatment, or amelioration of one or more of the symptoms of diseases or disorders associated with androgen receptor activity.

The compositions contain one or more compounds provided herein. The compounds are formulated into suitable pharmaceutical preparations such as solutions, suspensions, tablets, dispersible tablets, pills, capsules, powders, sustained release formulations or elixirs, for oral administration or in sterile solutions or suspensions for parenteral administration, as well as transdermal patch preparation and dry powder inhalers. Typically the compounds described above are formulated into pharmaceutical compositions using techniques and procedures well known in the art (see, *e.g.*, Ansel *Introduction to Pharmaceutical Dosage Forms, Fourth Edition* **1985**, 126).

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein is prepared using known techniques, including, but not limited to mixing, dissolving, granulating, dragee-making, levigating, emulsifying, encapsulating, entrapping or tabletting processes.

In the compositions, effective concentrations of one or more compounds or pharmaceutically acceptable derivatives is (are) mixed with a suitable pharmaceutical carrier or vehicle. The compounds can be derivatized as the corresponding salts, esters, enol ethers or esters, acids, bases, solvates, hydrates or prodrugs prior to

formulation, as described above. The concentrations of the compounds in the compositions are effective for delivery of an amount, upon administration, that treats, prevents, or ameliorates one or more of the symptoms of diseases or disorders associated with androgen activity or in which androgen activity is implicated.

Typically, the compositions are formulated for single dosage administration. To formulate a composition, the weight fraction of compound is dissolved, suspended, dispersed or otherwise mixed in a selected vehicle at an effective concentration such that the treated condition is relieved or ameliorated. Pharmaceutical carriers or vehicles suitable for administration of the compounds provided herein include any such carriers known to those skilled in the art to be suitable for the particular mode of administration.

In addition, the compounds can be formulated as the sole pharmaceutically active ingredient in the composition or can be combined with other active ingredients. Liposomal suspensions, including tissue-targeted liposomes, such as tumor-targeted liposomes, also can be suitable as pharmaceutically acceptable carriers. These can be prepared according to methods known to those skilled in the art. For example, liposome formulations can be prepared as described in U.S. Patent No. 4,522,811. Briefly, liposomes such as multilamellar vesicles (MLV's) can be formed by drying down egg phosphatidyl choline and brain phosphatidyl serine (7:3 molar ratio) on the inside of a flask. A solution of a compound provided herein in phosphate buffered saline lacking divalent cations (PBS) is added and the flask shaken until the lipid film is dispersed. The resulting vesicles are washed to remove unencapsulated compound, pelleted by centrifugation, and then resuspended in PBS.

The active compound is included in the pharmaceutically acceptable carrier in an amount sufficient to exert a therapeutically useful effect in the absence of undesirable side effects on the subject treated.

The concentration of active compound in the pharmaceutical composition will depend on absorption, inactivation and excretion rates of the active compound, the physicochemical characteristics of the compound, the dosage schedule, and amount administered as well as other factors known to those of skill in the art. For example, the amount that is delivered is sufficient to ameliorate one or more of the symptoms

of diseases or disorders associated with androgen activity or in which androgen activity is implicated, as described herein.

The effective amount of a compound of provided herein can be determined by one of ordinary skill in the art, and includes exemplary dosage amounts for a mammal of from about 0.05 to 100 mg/kg of body weight of active compound per day, which can be administered in a single dose or in the form of individual divided doses, such as from 1 to 4 times per day. It will be understood that the specific dose level and frequency of dosage for any particular subject can be varied and will depend upon a variety of factors, including the activity of the specific compound employed, the metabolic stability and length of action of that compound, the species, age, body weight, general health, sex and diet of the subject, the mode and time of administration, rate of excretion, drug combination, and severity of the particular condition.

The active ingredient can be administered at once, or can be divided into a number of smaller doses to be administered at intervals of time. It is understood that the precise dosage and duration of treatment is a function of the disease being treated and can be determined empirically using known testing protocols or by extrapolation from *in vivo* or *in vitro* test data. It is to be noted that concentrations and dosage values also can vary with the severity of the condition to be alleviated. It is to be further understood that for any particular subject, specific dosage regimens should be adjusted over time according to the individual need and the professional judgment of the person administering or supervising the administration of the compositions, and that the concentration ranges set forth herein are exemplary only and are not intended to limit the scope or practice of the compounds, compositions, methods and other subject matter provided herein.

Pharmaceutically acceptable derivatives include acids, bases, enol ethers and esters, salts, esters, hydrates, solvates and prodrug forms. The derivative is selected such that its pharmacokinetic properties are superior to the corresponding neutral compound.

Thus, effective concentrations or amounts of one or more of the compounds described herein or pharmaceutically acceptable derivatives thereof are mixed with a suitable pharmaceutical carrier or vehicle for systemic, topical or local administration

to form pharmaceutical compositions. Compounds are included in an amount effective for ameliorating one or more symptoms of, or for treating or preventing diseases or disorders associated with androgen receptor activity or in which androgen receptor activity is implicated, as described herein. The concentration of active compound in the composition will depend on absorption, inactivation, excretion rates of the active compound, the dosage schedule, amount administered, particular formulation as well as other factors known to those of skill in the art.

The compositions are intended to be administered by a suitable route, including orally in form of capsules, tablets, granules, powders or liquid formulations including syrups; parenterally, such as subcutaneously, intravenously, intramuscularly, with intersternal injection or infusion techniques (as sterile injectable aq. or non-aq. solutions or suspensions); nasally such as by inhalation spray; topically, such as in the form of a cream or ointment; rectally such as in the form of suppositories; liposomally; and locally. The compositions can be in liquid, semi-liquid or solid form and are formulated in a manner suitable for each route of administration. In certain embodiments, administration of the formulation include parenteral and oral modes of administration. In one embodiment, the compositions are administered orally.

In certain embodiments, the pharmaceutical compositions provided herein containing one or more compounds provided herein is a solid (*e.g.*, a powder, tablet, and/or capsule). In certain of such embodiments, a solid the pharmaceutical composition containing one or more compounds provided herein is prepared using ingredients known in the art, including, but not limited to, starches, sugars, diluents, granulating agents, lubricants, binders, and disintegrating agents.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein is formulated as a depot preparation. Certain of such depot preparations are typically longer acting than non-depot preparations. In certain embodiments, such preparations are administered by implantation (for example subcutaneously or intramuscularly) or by intramuscular injection. In certain embodiments, depot preparations are prepared using suitable polymeric or hydrophobic materials (for example an emulsion in an acceptable oil) or ion exchange resins, or as sparingly soluble derivatives, for example, as a sparingly soluble salt.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein contains a delivery system. Examples of delivery systems include, but are not limited to, liposomes and emulsions. Certain delivery systems are useful for preparing certain pharmaceutical compositions including those containing hydrophobic compounds. In certain embodiments, certain organic solvents such as dimethylsulfoxide are used.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein contains one or more tissue-specific delivery molecules designed to deliver the pharmaceutical composition to specific tissues or cell types. For example, in certain embodiments, pharmaceutical compositions include liposomes coated with a tissue-specific antibody.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein contains a co-solvent system. Certain of such co-solvent systems contain, for example, benzyl alcohol, a nonpolar surfactant, a water-miscible organic polymer, and an aqueous phase. In certain embodiments, such co-solvent systems are used for hydrophobic compounds. A non-limiting example of such a co-solvent system is the VPD co solvent system, which is a solution of absolute ethanol containing 3% w/v benzyl alcohol, 8% w/v of the nonpolar surfactant Polysorbate 80™, and 65% w/v polyethylene glycol 300. The proportions of such co solvent systems can be varied considerably without significantly altering their solubility and toxicity characteristics. Furthermore, the identity of co solvent components can be varied: for example, other surfactants can be used instead of Polysorbate 80™; the fraction size of polyethylene glycol can be varied; other biocompatible polymers can replace polyethylene glycol, *e.g.*, polyvinyl pyrrolidone; and other sugars or polysaccharides can substitute for dextrose.

In certain embodiments, solutions or suspensions used for parenteral, intradermal, subcutaneous, or topical application can include any of the following components: a sterile diluent, such as water for injection, saline solution, fixed oil, polyethylene glycol, glycerine, propylene glycol or other synthetic solvent; antimicrobial agents, such as benzyl alcohol and methyl parabens; antioxidants, such as ascorbic acid and sodium bisulfite; chelating agents, such as ethylenediamine-tetraacetic acid (EDTA); buffers, such as acetates, citrates and phosphates; and agents

for the adjustment of tonicity such as sodium chloride or dextrose. Parenteral preparations can be enclosed in ampules, disposable syringes or single or multiple dose vials made of glass, plastic or other suitable material.

In instances in which the compounds exhibit insufficient solubility, methods for solubilizing compounds can be used. Such methods are known to those of skill in this art, and include, but are not limited to, using cosolvents, such as dimethylsulfoxide (DMSO), using surfactants, such as TWEEN®, or dissolution in aqueous sodium bicarbonate. Derivatives of the compounds, such as prodrugs of the compounds also can be used in formulating effective pharmaceutical compositions.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein includes a sustained release system. A non-limiting example of such a sustained-release system is a semipermeable matrix of solid hydrophobic polymers. In certain embodiments, sustained release systems may, depending on their chemical nature, release compounds over a period of hours, days, weeks or months.

In certain embodiments, upon mixing or addition of the compound(s), the resulting mixture can be, *e.g.*, a solution, a suspension or an emulsion. The form of the resulting mixture depends upon a number of factors, including the intended mode of administration and the solubility of the compound in the selected carrier or vehicle. The effective concentration is sufficient for ameliorating the symptoms of the disease, disorder or condition treated and can be empirically determined.

The pharmaceutical compositions are provided for administration to humans and animals in unit dosage forms, such as tablets, capsules, pills, powders, granules, sterile parenteral solutions or suspensions, and oral solutions or suspensions, and oil-water emulsions containing suitable quantities of the compounds or pharmaceutically acceptable derivatives thereof. The pharmaceutically active compounds and derivatives thereof are typically formulated and administered in unit-dosage forms or multiple-dosage forms. Examples of unit-dose forms include ampoules and syringes and individually packaged tablets or capsules. Unit-dose forms can be administered in fractions or multiples thereof. Examples of multiple-dose forms include vials, bottles of tablets or capsules or bottles of pints or gallons. Hence, multiple dose form is a multiple of unit-doses which are not segregated in packaging.

The composition can contain along with an active ingredient: a diluent. Exemplary diluents include, but are not limited to, lactose, sucrose, dicalcium phosphate, or carboxymethylcellulose; a lubricant, such as magnesium stearate, calcium stearate and talc; and a binder such as starch, natural gums, such as gum acacia, gelatin, glucose, molasses, polvinylpyrrolidine, celluloses and derivatives thereof, povidone, crospovidones and other such binders known to those of skill in the art. Liquid pharmaceutically administrable compositions can, for example, be prepared by dissolving, dispersing, or otherwise mixing an active compound as defined above and optional pharmaceutical adjuvants in a carrier, such as, for example, water, saline, aqueous dextrose, glycerol, glycols and alcohols, such as ethanol, to thereby form a solution or suspension. If desired, the pharmaceutical composition to be administered also can contain minor amounts of nontoxic auxiliary substances such as, *e.g.*, wetting agents, emulsifying agents, solubilizing agents and pH buffering agents, for example, acetate, sodium citrate, cyclodextrin derivatives, sorbitan monolaurate, triethanolamine sodium acetate, triethanolamine oleate, and other such agents. Actual methods of preparing such dosage forms are known, or will be apparent, to those skilled in this art; for example, see Remington's Pharmaceutical Sciences, Mack Publishing Company, Easton, Pa., 15th Edition, 1975. The composition or formulation to be administered will, in any event, contain a quantity of the active compound in an amount sufficient to alleviate the symptoms of the treated subject.

Dosage forms or compositions containing active ingredient in the range of 0.005% to 100% with the balance made up from non-toxic carrier can be prepared. For oral administration, a pharmaceutically acceptable non-toxic composition is formed by the incorporation of any of the normally employed excipients, such as, for example pharmaceutical grades of mannitol, lactose, starch, magnesium stearate, talcum, cellulose derivatives, sodium crosscarmellose, glucose, sucrose, magnesium carbonate or sodium saccharin. Such compositions include solutions, suspensions, tablets, capsules, powders and sustained release formulations, such as, but not limited to, implants and microencapsulated delivery systems, and biodegradable, biocompatible polymers, such as collagen, ethylene vinyl acetate, polyanhydrides, polyglycolic acid, polyorthoesters, polylactic acid and others. Methods for

preparation of these compositions are known to those skilled in the art. The contemplated compositions can contain 0.001%-100% active ingredient, in one embodiment 0.1-85%, in another embodiment 75-95%.

In certain embodiments, the compounds can be administered in a form suitable for immediate release or extended release. Immediate release or extended release can be achieved with suitable pharmaceutical compositions or, particularly in the case of extended release, with devices such as subcutaneous implants or osmotic pumps. Exemplary compositions for topical administration include a topical carrier such as PLASTIBASE® (mineral oil gelled with polyethylene).

In certain embodiments, compounds used in the pharmaceutical compositions can be provided as pharmaceutically acceptable salts with pharmaceutically compatible counterions. Pharmaceutically compatible salts can be formed with many acids, including but not limited to hydrochloric, sulfuric, acetic, lactic, tartaric, malic, succinic, etc.

In certain embodiments, the pharmaceutical compositions contain a compound provided herein in a therapeutically effective amount. In certain embodiments, the therapeutically effective amount is sufficient to prevent, alleviate or ameliorate symptoms of a disease or to prolong the survival of the subject being treated. Determination of a therapeutically effective amount is well within the capability of those skilled in the art.

The compositions can include other active compounds to obtain desired combinations of properties. The compounds provided herein, or pharmaceutically acceptable derivatives thereof as described herein, also can be advantageously administered for therapeutic or prophylactic purposes together with another pharmacological agent known in the general art to be of value in treating one or more of the diseases or medical conditions referred to hereinabove, such as diseases or disorders associated with androgen receptor activity or in which androgen receptor activity is implicated. It is to be understood that such combination therapy constitutes a further aspect of the compositions and methods of treatment provided herein.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein is formulated as a prodrug. In certain embodiments, prodrugs are useful because they are easier to administer than the corresponding active

form. For example, in certain instances, a prodrug can be more bioavailable (*e.g.*, through oral administration) than is the corresponding active form. In certain instances, a prodrug can have improved solubility compared to the corresponding active form. In certain embodiments, a prodrug is an ester. In certain embodiments, such prodrugs are less water soluble than the corresponding active form. In certain instances, such prodrugs possess superior transmittal across cell membranes, where water solubility is detrimental to mobility. In certain embodiments, the ester in such prodrugs is metabolically hydrolyzed to carboxylic acid. In certain instances the carboxylic acid containing compound is the corresponding active form. In certain embodiments, a prodrug contains a short peptide (polyaminoacid) bound to an acid group. In certain of such embodiments, the peptide is metabolized to form the corresponding active form.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein is useful for treating a conditions or disorder in a mammalian, and particularly in a human subject. Suitable administration routes include, but are not limited to, oral, rectal, transmucosal, intestinal, enteral, topical, suppository, through inhalation, intrathecal, intraventricular, intraperitoneal, intranasal, intraocular and parenteral (*e.g.*, intravenous, intramuscular, intramedullary, and subcutaneous). In certain embodiments, pharmaceutical compositions are administered to achieve local rather than systemic exposures. For example, pharmaceutical compositions can be injected directly in the area of desired effect (*e.g.*, in the renal or cardiac area). In certain embodiments in which the pharmaceutical composition is administered locally, the dosage regimen is adjusted to achieve a desired local concentration of a compound provided herein.

In certain embodiments, a pharmaceutical composition containing one or more compounds provided herein is administered in the form of a dosage unit (*e.g.*, tablet, capsule, bolus, etc.). In certain embodiments, such dosage units contain a selective androgen receptor modulator in a dose from about 0.01 μg/kg of body weight to about 50 mg/kg of body weight. In certain embodiments, dosage units contain a selective androgen receptor modulator in a dose from about from 1 μg to 500 μg. In certain embodiments, dosage units contain a selective androgen receptor modulator in a dose from about from 1 μg to 10 μg. In certain embodiments, dosage units contain a

selective androgen receptor modulator in a dose from about from 10 μg to 100 μg. In certain embodiments, dosage units contain a selective androgen receptor modulator in a dose from about from 100 μg to 500 μg. In certain embodiments, dosage units contain a selective androgen receptor modulator in a dose from about from 0.1 mg to 250 mg. In certain, dosage units contain a selective androgen receptor modulator in a dose from about from 0.5 mg to 125 mg. In certain embodiments, dosage units contain a selective androgen receptor modulator in a dose from about from 1 mg to 100 mg. In certain embodiments, dosage units contain a selective androgen receptor modulator in a dose from about from 10 mg to 50 mg.

In certain embodiments, such dosage units contain a selective androgen receptor modulator in a dose from about 0.05 μg/kg of body weight to about 40 mg/kg of body weight. In certain embodiments, such dosage units contain a selective androgen receptor modulator in a dose from about 0.1 μg/kg of body weight to about 30 mg/kg of body weight. In certain embodiments, such dosage units contain a selective androgen receptor modulator in a dose from about 0.5 μg/kg of body weight to about 25 mg/kg of body weight. In certain embodiments, such dosage units contain a selective androgen receptor modulator in a dose from about 1 μg/kg of body weight to about 20 mg/kg of body weight. In certain embodiments, such dosage units contain a selective androgen receptor modulator in a dose from about 2 μg/kg of body weight to about 15 mg/kg of body weight. In certain embodiments, such dosage units contain a selective androgen receptor modulator in a dose from about 10 μg/kg of body weight to about 5 mg/kg of body weight. In certain embodiments, pharmaceutical compositions are administered as needed, once per day, twice per day, three times per day, or four or more times per day. It is recognized by those skilled in the art that the particular dose, frequency, and duration of administration depends on a number of factors, including, without limitation, the biological activity desired, the condition of the subject, and tolerance for the pharmaceutical composition.

In certain embodiments, a pharmaceutical composition provided herein is administered for a period of continuous therapy. For example, a pharmaceutical composition provided herein can be administered over a period of days, weeks, months, or years.

Dosage amount, interval between doses, and duration of treatment can be adjusted to achieve a desired effect. In certain embodiments, dosage amount and interval between doses are adjusted to maintain a desired concentration on compound in a subject. For example, in certain embodiments, dosage amount and interval between doses are adjusted to provide plasma concentration of a compound provided herein at an amount sufficient to achieve a desired effect. In certain of such embodiments the plasma concentration is maintained above the minimal effective concentration (MEC). In certain embodiments, pharmaceutical compositions provided herein are administered with a dosage regimen designed to maintain a concentration above the MEC for 10-90% of the time, between 30-90% of the time, or between 50-90% of the time.

1. Compositions for oral administration

In certain embodiments, oral pharmaceutical dosage forms are either solid, gel or liquid. The solid dosage forms are tablets, capsules, granules, and bulk powders. Types of oral tablets include compressed, chewable lozenges and tablets which can be enteric-coated, sugar-coated or film-coated. Capsules can be hard or soft gelatin capsules, while granules and powders can be provided in non-effervescent or effervescent form with the combination of other ingredients known to those skilled in the art.

In certain embodiments, the formulations are solid dosage forms, preferably capsules or tablets. The solid dosage forms, *e.g.*, tablets, pills, capsules and troches, can contain any of the following ingredients, or compounds of a similar nature: a binder; a diluent; a disintegrating agent; a lubricant; a glidant; a sweetening agent; and a flavoring agent.

In certain embodiments, pharmaceutical compositions for oral administration are push fit capsules made of gelatin. Certain of such push fit capsules contain one or more compounds provided herein in admixture with one or more filler such as lactose, binders such as starches, and/or lubricants such as talc or magnesium stearate and, optionally, stabilizers. In certain embodiments, pharmaceutical compositions for oral administration are soft, sealed capsules made of gelatin and a plasticizer, such as glycerol or sorbitol. In certain soft capsules, one or more compounds provided are be

dissolved or suspended in suitable liquids, such as fatty oils, liquid paraffin, or liquid polyethylene glycols. In addition, stabilizers can be added.

In certain embodiments, pharmaceutical compositions are prepared for buccal administration. Certain of such pharmaceutical compositions are tablets or lozenges formulated in conventional manner.

Examples of binders for use in the compositions provided herein include microcrystalline cellulose, gum tragacanth, glucose solution, acacia mucilage, gelatin solution, sucrose and starch paste. Lubricants include talc, starch, magnesium or calcium stearate, lycopodium and stearic acid. Diluents include, for example, lactose, sucrose, starch, kaolin, salt, mannitol and dicalcium phosphate. Glidants include, but are not limited to, colloidal silicon dioxide. Disintegrating agents include crosscarmellose sodium, sodium starch glycolate, alginic acid, sodium alginate, corn starch, potato starch, bentonite, methylcellulose, agar and carboxymethylcellulose. Coloring agents include, for example, any of the approved certified water soluble FD and C dyes, mixtures thereof; and water insoluble FD and C dyes suspended on alumina hydrate. Sweetening agents include sucrose, lactose, mannitol and artificial sweetening agents such as saccharin, and any number of spray dried flavors. Flavoring agents include natural flavors extracted from plants such as fruits and synthetic blends of compounds which produce a pleasant sensation, such as, but not limited to peppermint and methyl salicylate. Wetting agents include propylene glycol monostearate, sorbitan monooleate, diethylene glycol monolaurate and polyoxyethylene laural ether. Emetic-coatings include fatty acids, fats, waxes, shellac, ammoniated shellac and cellulose acetate phthalates. Film coatings include hydroxyethylcellulose, sodium carboxymethylcellulose, polyethylene glycol 4000 and cellulose acetate phthalate.

If oral administration is desired, the compound could be provided in a composition that protects it from the acidic environment of the stomach. For example, the composition can be formulated in an enteric coating that maintains its integrity in the stomach and releases the active compound in the intestine. The composition also can be formulated in combination with an antacid or other such ingredient.

When the dosage unit form is a capsule, it can contain, in addition to material of the above type, a liquid carrier such as a fatty oil. In addition, dosage unit forms can contain various other materials which modify the physical form of the dosage unit, for example, coatings of sugar and other enteric agents. The compounds also can be administered as a component of compositions, *e.g.*, an elixir, suspension, syrup, wafer, sprinkle, or chewing gum. A syrup can contain, in addition to the active compounds, sucrose as a sweetening agent and certain preservatives, dyes and colorings and flavors.

The active materials also can be mixed with other active materials which do not impair the desired action, or with materials that supplement the desired action, such as antacids, H2 blockers, and diuretics. The active ingredient is a compound or pharmaceutically acceptable derivative thereof as described herein. Higher concentrations, up to about 98% by weight of the active ingredient can be included.

Pharmaceutically acceptable carriers included in tablets are binders, lubricants, diluents, disintegrating agents, coloring agents, flavoring agents, and wetting agents. Enteric-coated tablets, because of the enteric-coating, resist the action of stomach acid and dissolve or disintegrate in the neutral or alkaline intestines. Sugar-coated tablets are compressed tablets to which different layers of pharmaceutically acceptable substances are applied. Film-coated tablets are compressed tablets which have been coated with a polymer or other suitable coating. Multiple compressed tablets are compressed tablets made by more than one compression cycle utilizing the pharmaceutically acceptable substances previously mentioned. Coloring agents also can be used in the above dosage forms. Flavoring and sweetening agents are used in compressed tablets, sugar-coated, multiple compressed and chewable tablets. Flavoring and sweetening agents are especially useful in the formation of chewable tablets and lozenges.

Liquid oral dosage forms include aqueous solutions, emulsions, suspensions, solutions and/or suspensions reconstituted from non-effervescent granules and effervescent preparations reconstituted from effervescent granules. Aqueous solutions include, for example, elixirs and syrups. Emulsions are either oil-in-water or water-in-oil.

Elixirs are clear, sweetened, hydroalcoholic preparations. Pharmaceutically acceptable carriers used in elixirs include solvents. Syrups are concentrated aqueous solutions of a sugar, for example, sucrose, and can contain a preservative. An emulsion is a two-phase system in which one liquid is dispersed in the form of small globules throughout another liquid. Pharmaceutically acceptable carriers used in emulsions are non-aqueous liquids, emulsifying agents and preservatives. Suspensions use pharmaceutically acceptable suspending agents and preservatives. Pharmaceutically acceptable substances used in non-effervescent granules, to be reconstituted into a liquid oral dosage form, include diluents, sweeteners and wetting agents. Pharmaceutically acceptable substances used in effervescent granules, to be reconstituted into a liquid oral dosage form, include organic acids and a source of carbon dioxide. Coloring and flavoring agents are used in all of the above dosage forms.

Solvents include glycerin, sorbitol, ethyl alcohol and syrup. Examples of preservatives include glycerin, methyl and propylparaben, benzoic add, sodium benzoate and alcohol. Examples of non-aqueous liquids utilized in emulsions include mineral oil and cottonseed oil. Examples of emulsifying agents include gelatin, acacia, tragacanth, bentonite, and surfactants such as polyoxyethylene sorbitan monooleate. Suspending agents include xanthan gum, sodium carboxymethyl-cellulose, pectin, tragacanth, Veegum and acacia. Diluents include lactose and sucrose. Sweetening agents include sucrose, syrups, glycerin and artificial sweetening agents such as saccharin. Wetting agents include propylene glycol monostearate, sorbitan monooleate, diethylene glycol monolaurate and polyoxyethylene lauryl ether. Organic acids include citric and tartaric acid. Sources of carbon dioxide include sodium bicarbonate and sodium carbonate. Coloring agents include any of the approved certified water soluble FD and C dyes, and mixtures thereof. Flavoring agents include natural flavors extracted from plants such fruits, and synthetic blends of compounds which produce a pleasant taste sensation.

For a solid dosage form, the solution or suspension, in for example propylene carbonate, vegetable oils or triglycerides, is preferably encapsulated in a gelatin capsule. Such solutions, and the preparation and encapsulation thereof, are disclosed in U.S. Patent Nos. 4,328,245; 4,409,239; and 4,410,545. For a liquid dosage form, the

solution, *e.g.*, for example, in a polyethylene glycol, can be diluted with a sufficient quantity of a pharmaceutically acceptable liquid carrier, *e.g.*, water, to be easily measured for administration.

Alternatively, liquid or semi-solid oral formulations can be prepared by dissolving or dispersing the active compound or salt in vegetable oils, glycols, triglycerides, propylene glycol esters (*e.g.*, propylene carbonate) and other such carriers, and encapsulating these solutions or suspensions in hard or soft gelatin capsule shells. Other useful formulations include those set forth in U.S. Patent Nos. Re 28,819 and 4,358,603. Briefly, such formulations include, but are not limited to, those containing a compound provided herein, a dialkylated mono- or poly-alkylene glycol, including, but not limited to, 1,2-dimethoxy-methane, diglyme, triglyme, tetraglyme, polyethylene glycol-350-dimethyl ether, polyethylene glycol-550-dimethyl ether, polyethylene glycol-750-dimethyl ether wherein 350, 550 and 750 refer to the approximate average molecular weight of the polyethylene glycol, and one or more antioxidants, such as butylated hydroxytoluene (BHT), butylated hydroxyanisole (BHA), propyl gallate, vitamin E, hydroquinone, hydroxycoumarins, ethanolamine, lecithin, cephalin, ascorbic acid, malic acid, sorbitol, phosphoric acid, thiodipropionic acid and its esters, and dithiocarbamates.

Other formulations include, but are not limited to, aqueous alcoholic solutions including a pharmaceutically acceptable acetal. Alcohols used in these formulations are any pharmaceutically acceptable water-miscible solvents having one or more hydroxyl groups, including, but not limited to, propylene glycol and ethanol. Acetals include, but are not limited to, di(lower alkyl) acetals of lower alkyl aldehydes such as acetaldehyde diethyl acetal.

In all embodiments, tablets and capsules formulations can be coated as known by those of skill in the art in order to modify or sustain dissolution of the active ingredient. Thus, for example, they can be coated with a conventional enterically digestible coating, such as phenylsalicylate, waxes and cellulose acetate phthalate.

Exemplary compositions can include fast-dissolving diluents such as mannitol, lactose, sucrose, and/or cyclodextrins. Also included in such formulations can be high molecular weight excipients such as celluloses (AVICEL®) or polyethylene glycols (PEG); an excipient to aid mucosal adhesion such as hydroxypropyl cellulose (HPC),

hydroxypropyl methyl cellulose (HPMC), sodium carboxymethyl cellulose (SCMC), and/or maleic anhydride copolymer (*e.g.*, GANTREZ®); and agents to control release such as polyacrylic copolymer (*e.g.*, CARBOPOL 934®). Lubricants, glidants, flavors, coloring agents and stabilizers also can be added for ease of fabrication and use.

In certain of such embodiments, a pharmaceutical composition for oral administration is formulated by combining one or more compounds provided herein with one or more pharmaceutically acceptable carriers. Certain of such carriers enable compounds provided herein to be formulated, *e.g.*, as tablets, pills, dragees, capsules, liquids, gels, syrups, slurries and suspensions, for oral ingestion by a subject. In certain embodiments, pharmaceutical compositions for oral use are obtained by mixing one or more compounds provided herein and one or more solid excipient. Suitable excipients include, but are not limited to, fillers, such as sugars, including lactose, sucrose, mannitol, or sorbitol; cellulose preparations such as, for example, maize starch, wheat starch, rice starch, potato starch, gelatin, gum tragacanth, methyl cellulose, hydroxypropylmethyl cellulose, sodium carboxymethylcellulose, and/or polyvinylpyrrolidone (PVP). In certain embodiments, such a mixture is optionally ground and auxiliaries are optionally added. In certain embodiments, pharmaceutical compositions are formed to obtain tablets or dragee cores. In certain embodiments, disintegrating agents (*e.g.*, cross linked polyvinyl pyrrolidone, agar, or alginic acid or a salt thereof, such as sodium alginate) are added.

In certain embodiments, dragee cores are provided with coatings. In certain of such embodiments, concentrated sugar solutions can be used, which can optionally contain gum arabic, talc, polyvinyl pyrrolidone, carbopol gel, polyethylene glycol, and/or titanium dioxide, lacquer solutions, and suitable organic solvents or solvent mixtures. Dyestuffs or pigments can be added to tablets or dragee coatings.

In certain embodiments, a daily dosage regimen for a subject contains an oral dose of between 0.1 mg and 2000 mg of a compound provided herein. In some embodiments, a daily dosage regimen contains a dose between 1 mg and 1000 mg, or 5 mg and 500 mg, or 10 mg and 100 mg of a compound provided herein. In certain embodiments, a daily dosage regimen is administered as a single daily dose. In certain embodiments, a daily dosage regimen is administered as two, three, four, or more than four doses.

2. Injectables, solutions and emulsions

In certain embodiments, the pharmaceutical composition is prepared for transmucosal administration. In certain of such embodiments penetrants appropriate to the barrier to be permeated are used in the formulation. Such penetrants are generally known in the art.

Parenteral administration, generally characterized by injection, either subcutaneously, intramuscularly or intravenously also is contemplated herein. Injectables can be prepared in conventional forms, either as liquid solutions or suspensions, solid forms suitable for solution or suspension in liquid prior to injection, or as emulsions. Suitable excipients are, for example, water, saline, dextrose, glycerol, mannitol, 1,3-butanediol, Ringer's solution, an isotonic sodium chloride solution or ethanol. In addition, if desired, the pharmaceutical compositions to be administered also can contain minor amounts of non-toxic auxiliary substances such as wetting or emulsifying agents, pH buffering agents, stabilizers, solubility enhancers, and other such agents, such as for example, mono-or diglycerides, fatty acids, such as oleic acid, sodium acetate, sorbitan monolaurate, triethanolamine oleate and cyclodextrins. Implantation of a slow-release or sustained-release system, such that a constant level of dosage is maintained (see, *e.g.*, U.S. Patent No. 3,710,795) also is contemplated herein. Briefly, a compound provided herein is dispersed in a solid inner matrix, *e.g.*, polymethyl-methacrylate, polybutylmethacrylate, plasticized or unplasticized polyvinylchloride, natural rubber, polyisoprene, plasticized nylon, plasticized polyethyleneterephthalate, polyisobutylene, polybutadiene, polyethylene, ethylene-vinylacetate copolymers, silicone rubbers, polydimethylsiloxanes, silicone carbonate copolymers, hydrophilic polymers such as hydrogels of esters of acrylic and methacrylic acid, collagen, cross-linked polyvinylalcohol and cross-linked partially hydrolyzed polyvinyl acetate, that is surrounded by an outer polymeric membrane, *e.g.*, polyethylene, polypropylene, ethylene/propylene copolymers, ethylene/ethyl acrylate copolymers, ethylene/vinylacetate copolymers, silicone rubbers, poly-dimethyl siloxanes, neoprene rubber, chlorinated polyethylene, polyvinylchloride, vinylchloride copolymers with vinyl acetate, vinylidene chloride, ethylene and propylene, ionomer polyethylene terephthalate, butyl rubber epichlorohydrin rubbers, ethylene/vinyl alcohol copolymer, ethylene/vinyl acetate/vinyl alcohol terpolymer,

and ethylene/vinyloxy-ethanol copolymer, that is insoluble in body fluids. The compound diffuses through the outer polymeric membrane in a release rate controlling step. The percentage of active compound contained in such parenteral compositions is highly dependent on the specific nature thereof, as well as the activity of the compound and the needs of the subject.

Parenteral administration of the compositions includes intravenous, subcutaneous and intramuscular administrations. Preparations for parenteral administration include sterile solutions ready for injection, sterile dry soluble products, such as lyophilized powders, ready to be combined with a solvent just prior to use, including hypodermic tablets, sterile suspensions ready for injection, sterile dry insoluble products ready to be combined with a vehicle just prior to use and sterile emulsions. The solutions can be either aqueous or nonaqueous.

If administered intravenously, suitable carriers include physiological saline or phosphate buffered saline (PBS), and solutions containing thickening and solubilizing agents, such as glucose, polyethylene glycol, and polypropylene glycol and mixtures thereof.

Pharmaceutically acceptable carriers used in parenteral preparations include aqueous vehicles, nonaqueous vehicles, antimicrobial agents, isotonic agents, buffers, antioxidants, local anesthetics, suspending and dispersing agents, emulsifying agents, sequestering or chelating agents and other pharmaceutically acceptable substances.

Examples of aqueous vehicles include Sodium Chloride Injection, Ringers Injection, Isotonic Dextrose Injection, Sterile Water Injection, Dextrose and Lactated Ringers Injection. Nonaqueous parenteral vehicles include fixed oils of vegetable origin, cottonseed oil, corn oil, sesame oil and peanut oil. Antimicrobial agents in bacteriostatic or fungistatic concentrations must be added to parenteral preparations packaged in multiple-dose containers which include phenols or cresols, mercurials, benzyl alcohol, chlorobutanol, methyl and propyl para-hydroxybenzoic acid esters, thimerosal, benzalkonium chloride and benzethonium chloride. Isotonic agents include sodium chloride and dextrose. Buffers include phosphate and citrate. Antioxidants include sodium bisulfate. Local anesthetics include procaine hydrochloride. Suspending and dispersing agents include sodium carboxymethyl-cellulose, hydroxypropyl methylcellulose and polyvinylpyrrolidone. Emulsifying

agents include Polysorbate 80 (TWEEN® 80). A sequestering or chelating agent of metal ions include EDTA. Pharmaceutical carriers also include ethyl alcohol, polyethylene glycol and propylene glycol for water miscible vehicles and sodium hydroxide, hydrochloric acid, citric acid or lactic acid for pH adjustment.

The concentration of the pharmaceutically active compound is adjusted so that an injection provides an effective amount to produce the desired pharmacological effect. The exact dose depends on the age, weight and condition of the subject or animal as is known in the art.

The unit-dose parenteral preparations are packaged in an ampoule, a vial or a syringe with a needle. All preparations for parenteral administration must be sterile, as is known and practiced in the art.

Illustratively, intravenous or intraarterial infusion of a sterile aqueous solution containing an active compound is an effective mode of administration. Another embodiment is a sterile aqueous or oily solution or suspension containing an active material injected as necessary to produce the desired pharmacological effect.

Injectables are designed for local and systemic administration. Typically a therapeutically effective dosage is formulated to contain a concentration of at least about 0.1% w/w up to about 90% w/w or more, preferably more than 1% w/w of the active compound to the treated tissue(s). The active ingredient can be administered at once, or can be divided into a number of smaller doses to be administered at intervals of time. It is understood that the precise dosage and duration of treatment is a function of the tissue being treated and can be determined empirically using known testing protocols or by extrapolation from *in vivo* or *in vitro* test data. It is to be noted that concentrations and dosage values also can vary with the age of the individual treated. It is to be further understood that for any particular subject, specific dosage regimens should be adjusted over time according to the individual need and the professional judgment of the person administering or supervising the administration of the formulations, and that the concentration ranges set forth herein are exemplary only and are not intended to limit the scope or practice of formulations provided herein.

The compounds can be formulated in any suitable vehicle or form. For example, they can be in micronized or other suitable form and/or can be derivatized to produce a more soluble active product or to produce a prodrug or for other purposes.

The form of the resulting mixture depends upon a number of factors, including, for example, an intended mode of administration and the solubility of the compound in the selected carrier or vehicle. The effective concentration is sufficient for ameliorating the symptoms of the condition and can be empirically determined.

In certain embodiments, a pharmaceutical composition is prepared for administration by injection wherein the pharmaceutical composition contains a carrier and is formulated in aqueous solution, such as water or physiologically compatible buffers such as Hanks's solution, Ringer's solution, or physiological saline buffer. In certain embodiments, other ingredients are included (*e.g.*, ingredients that aid in solubility or serve as preservatives). In certain embodiments, injectable suspensions are prepared using appropriate liquid carriers, thickeners or suspending agents. Certain pharmaceutical compositions for injection are presented in unit dosage form, *e.g.*, in ampules or in multi dose containers. Certain pharmaceutical compositions for injection are suspensions, solutions or emulsions in oily or aqueous vehicles, and can contain formulatory agents such as suspending, stabilizing and/or dispersing agents. Certain solvents suitable for use in pharmaceutical compositions for injection include, but are not limited to, lipophilic solvents and fatty oils, such as sesame oil, synthetic fatty acid esters, such as ethyl oleate or triglycerides, and liposomes. Aqueous injection suspensions can contain substances that increase the viscosity of the suspension, such as sodium carboxymethyl cellulose, sorbitol, or dextran. Optionally, such suspensions also can contain suitable stabilizers or agents that increase the solubility of the compounds to allow for the preparation of highly concentrated solutions.

In certain embodiments, the pharmaceutical composition is prepared for administration by inhalation. Certain of such pharmaceutical compositions for inhalation are prepared in the form of an aerosol spray in a pressurized pack or a nebulizer. Certain of such pharmaceutical compositions contain a propellant, *e.g.*, dichlorodifluoromethane, trichlorofluoromethane, dichlorotetrafluoroethane, carbon dioxide or other suitable gas. In certain embodiments using a pressurized aerosol, the dosage unit can be determined with a valve that delivers a metered amount. In certain embodiments, capsules and cartridges for use in an inhaler or insufflator can be

formulated. Certain of such formulations contain a powder mixture of a compound provided herein and a suitable powder base such as lactose or starch.

In certain embodiments, the pharmaceutical compositions provided are administered by continuous intravenous infusion. In certain of such embodiments, from 0.01 mg to 500 mg of the composition is administered per day.

3. Lyophilized powders

Of interest herein also are lyophilized powders, which can be reconstituted for administration as solutions, emulsions and other mixtures. They also can be reconstituted and formulated as solids or gels.

The sterile, lyophilized powder is prepared by dissolving a compound provided herein, or a pharmaceutically acceptable derivative thereof, in a suitable solvent. The solvent can contain an excipient which improves the stability or other pharmacological component of the powder or reconstituted solution, prepared from the powder. Excipients that can be used include, but are not limited to, dextrose, sorbital, fructose, corn syrup, xylitol, glycerin, glucose, sucrose or other suitable agent. The solvent also can contain a buffer, such as citrate, sodium or potassium phosphate or other such buffer known to those of skill in the art at, typically, about neutral pH. Subsequent sterile filtration of the solution followed by lyophilization under standard conditions known to those of skill in the art provides the desired formulation. Generally, the resulting solution will be apportioned into vials for lyophilization. Each vial will contain a single dosage 10-1000 mg, in one embodiment, 100-500 mg or multiple dosages of the compound. The lyophilized powder can be stored under appropriate conditions, such as at about 4°C to room temperature.

Reconstitution of this lyophilized powder with water for injection provides a formulation for use in parenteral administration. For reconstitution, about 1-50 mg, preferably 5-35 mg, more preferably about 9-30 mg of lyophilized powder, is added per mL of sterile water or other suitable carrier. The precise amount depends upon the selected compound. Such amount can be empirically determined.

4. Topical administration

Topical mixtures are prepared as described for the local and systemic administration. The resulting mixture can be a solution, suspension or emulsion, and are formulated, *e.g.*, as creams, gels, ointments, emulsions, solutions, elixirs, lotions,

suspensions, tinctures, pastes, foams, aerosols, irrigations, sprays, suppositories, bandages, dermal patches or any other formulations suitable for topical administration.

The compounds or pharmaceutically acceptable derivatives thereof can be formulated as aerosols for topical application, such as by inhalation (see, *e.g.*, U.S. Patent Nos. 4,044,126, 4,414,209, and 4,364,923, which describe aerosols for delivery of a steroid useful for treatment of inflammatory diseases, particularly asthma). These formulations for administration to the respiratory tract can be in the form of an aerosol or solution for a nebulizer, or as a microfine powder for insufflation, alone or in combination with an inert carrier such as lactose. In such a case, the particles of the formulation will typically have diameters of less than 50 microns, preferably less than 10 microns.

In certain embodiments, the pharmaceutical compositions for inhalation are prepared in the form of an aerosol spray in a pressurized pack or a nebulizer. Certain of such pharmaceutical compositions contain a propellant, *e.g.*, dichlorodifluoro-methane, trichlorofluoromethane, dichlorotetrafluoroethane, carbon dioxide or other suitable gas. In certain embodiments using a pressurized aerosol, the dosage unit can be determined with a valve that delivers a metered amount. In certain embodiments, capsules and cartridges for use in an inhaler or insufflator can be formulated. Certain of such formulations contain a powder mixture of a compound provided herein and a suitable powder base such as lactose or starch.

Exemplary compositions for nasal aerosol or inhalation administration include solutions which can contain, for example, benzyl alcohol or other suitable preservatives, absorption promoters to enhance absorption and/or bioavailability, and/or other solubilizing or dispersing agents such as those known in the art.

The compounds can be formulated for local or topical application, such as for topical application to the skin and mucous membranes, such as in the eye, in the form of gels, creams, and lotions and for application to the eye or for intracisternal or intraspinal application. Topical administration is contemplated for transdermal delivery and also for administration to the eyes or mucosa, or for inhalation therapies. Nasal solutions of the active compound alone or in combination with other pharmaceutically acceptable excipients also can be administered. These solutions,

particularly those intended for ophthalmic use, can be formulated as 0.01% - 10% isotonic solutions, pH about 5-7, with appropriate salts. In certain embodiments in which the compositions is administered locally, the dosage regimen is adjusted to achieve a desired local concentration of a compound provided herein.

In certain embodiments, the pharmaceutical composition is prepared for topical administration. Certain of such pharmaceutical compositions contain bland moisturizing bases, such as ointments or creams. Exemplary suitable ointment bases include, but are not limited to, petrolatum, petrolatum plus volatile silicones, lanolin and water in oil emulsions such as Eucerin™, available from Beiersdorf (Cincinnati, Ohio). Exemplary suitable cream bases include, but are not limited to, Nivea™ Cream, available from Beiersdorf (Cincinnati, Ohio), cold cream (USP), Purpose Cream™, available from Johnson & Johnson (New Brunswick, New Jersey), hydrophilic ointment (USP) and Lubriderm™, available from Pfizer (Morris Plains, New Jersey).

In certain embodiments, the formulation, route of administration and dosage for the pharmaceutical composition provided herein can be chosen in view of a particular subject's condition. (See *e.g.*, Fingl *et al.* 1975, in "The Pharmacological Basis of Therapeutics", Ch. 1 p. 1). In certain embodiments, the pharmaceutical composition is administered as a single dose. In certain embodiments, a pharmaceutical composition is administered as a series of two or more doses administered over one or more days.

5. Compositions for other routes of administration

Other routes of administration, such as topical application, transdermal patches, and rectal administration also are contemplated herein.

In certain embodiments, the pharmaceutical composition is prepared for topical administration such as rectal administration. The pharmaceutical dosage forms for rectal administration include, but are not limited to rectal suppositories, capsules and tablets for systemic effect. In certain embodiments, a pharmaceutical agent is prepared for rectal administration, such as a suppositories or retention enema. Certain of such pharmaceutical agents contain known ingredients, such as cocoa butter and/or other glycerides. Rectal suppositories are used herein mean solid bodies for insertion into the rectum which melt or soften at body temperature releasing one or

more pharmacologically or therapeutically active ingredients. Pharmaceutically acceptable substances utilized in rectal suppositories are bases or vehicles and agents to raise the melting point. Examples of bases include cocoa butter (theobroma oil), glycerin-gelatin, carbowax (polyoxyethylene glycol) and appropriate mixtures of mono-, di- and triglycerides of fatty acids. Combinations of the various bases can be used. In certain embodiments, the pharmaceutical compositions contain bland moisturizing bases, such as ointments or creams. Exemplary suitable ointment bases include, but are not limited to, petrolatum, petrolatum plus volatile silicones, lanolin and water in oil emulsions such as Eucerin™, available from Beiersdorf (Cincinnati, Ohio). Exemplary suitable cream bases include, but are not limited to, Nivea™ Cream, available from Beiersdorf (Cincinnati, Ohio), cold cream (USP), Purpose Cream™, available from Johnson & Johnson (New Brunswick, New Jersey), hydrophilic ointment (USP) and Lubriderm™, available from Pfizer (Morris Plains, New Jersey). Agents to raise the melting point of suppositories include spermaceti and wax. Rectal suppositories can be prepared either by the compressed method or by molding. The typical weight of a rectal suppository is about 2 to 3 gm.

Tablets and capsules for rectal administration are manufactured using the same pharmaceutically acceptable substance and by the same methods as for formulations for oral administration.

6. Articles of manufacture

The compounds or pharmaceutically acceptable derivatives can be packaged as articles of manufacture containing packaging material, within the packaging material a compound or pharmaceutically acceptable derivative thereof provided herein, which is effective for modulating the activity of androgen receptor, or for treatment, prevention or amelioration of one or more symptoms of androgen receptor mediated diseases or disorders, or diseases or disorders in which androgen receptor activity is implicated, and a label that indicates that the compound or composition, or pharmaceutically acceptable derivative thereof, is used for modulating the activity of androgen receptor or for treatment, prevention or amelioration of one or more symptoms of androgen receptor mediated diseases or disorders, or diseases or disorders in which androgen receptor activity is implicated.

The articles of manufacture provided herein contain packaging materials. Packaging materials for use in packaging pharmaceutical products are well known to those of skill in the art. See, *e.g.*, U.S. Patent Nos. 5,323,907, 5,052,558 and 5,033,252. Examples of pharmaceutical packaging materials include, but are not limited to, blister packs, bottles, tubes, inhalers, pumps, bags, vials, containers, syringes, bottles, and any packaging material suitable for a selected formulation and intended mode of administration and treatment. A wide array of formulations of the compounds and compositions provided herein are contemplated as are a variety of treatments for any disease or disorder in which androgen receptor activity is implicated as a mediator or contributor to the symptoms or cause.

In certain embodiments, the pharmaceutical compositions can be presented in a pack or dispenser device which can contain one or more unit dosage forms containing a compound provided herein. The pack can for example contain metal or plastic foil, such as a blister pack. The pack or dispenser device can be accompanied by instructions for administration. The pack or dispenser also can be accompanied with a notice associated with the container in form prescribed by a governmental agency regulating the manufacture, use, or sale of pharmaceuticals, which notice is reflective of approval by the agency of the form of the drug for human or veterinary administration. Such notice, for example, can be the labeling approved by the U.S. Food and Drug Administration for prescription drugs, or the approved product insert. Compositions containing a compound provided herein formulated in a compatible pharmaceutical carrier also can be prepared, placed in an appropriate container, and labeled for treatment of an indicated condition.

F. Evaluation of the activity of the compounds

Standard physiological, pharmacological and biochemical procedures are available for testing compounds, including any provided herein, to confirm or to identify those that possess activity as androgen receptor modulators. Such procedures include, *in vitro* and *in* vivo assays for androgen receptor modulators. Exemplary assays include, but are not limited to, fluorescence polarization assay, luciferase assay and co-transfection assay. In certain embodiments, the compounds provided herein are capable of modulating activity of androgen receptor in a "co-transfection" assay (also called a "cis-trans" assay), which is known in the art. *See e.g.*, Evans *et al.*,

Science, 240:889-95 (1988); U.S. Patent Nos. 4,981,784 and 5,071,773; Pathirana *et al.*, "Nonsteroidal Human Progesterone Receptor Modulators from the Marie Alga Cymopolia Barbata," *Mol. Pharm. 47*:630-35 (1995)). Modulating activity in a co-transfection assay has been shown to correlate with *in vivo* modulating activity. Thus, in certain embodiments, such assays are predictive of *in vivo* activity. *See, e.g*, Berger *et al., J. Steroid Biochem. Molec. Biol.* 41:773 (1992).

In certain co-transfection assays, two different co-transfection plasmids are prepared. In the first co-transfection plasmid, cloned cDNA encoding an intracellular receptor (*e.g.,* androgen receptor) is operatively linked to a constitutive promoter (*e.g.,* the SV 40 promoter). In the second co-transfection plasmid, cDNA encoding a reporter protein, such as firefly luciferase (LUC), is operatively linked to a promoter that is activated by a receptor-dependant activation factor. Both co-transfection plasmids are co-transfected into the same cells. Expression of the first co-transfection plasmid results in production of the intracellular receptor protein. Activation of that intracellular receptor protein (*e.g.*, by binding of an agonist) results in production of a receptor-dependant activation factor for the promoter of the second co-transfection plasmid. That receptor-dependant activation factor in turn results in expression of the reporter protein encoded on the second co-transfection plasmid. Thus, reporter protein expression is linked to activation of the receptor. Typically, that reporter activity can be conveniently measured (*e.g.*, as increased luciferase production).

Certain co-transfection assays can be used to identify agonists, partial agonists, and/or antagonists of intracellular receptors. In certain embodiments, to identify agonists, co-transfected cells are exposed to a test compound. If the test compound is an agonist or partial agonist, reporter activity is expected to increase compared to co-transfected cells in the absence of the test compound. In certain embodiments, to identify antagonists, the cells are exposed to a known agonist (*e.g.,* androgen for the androgen receptor) in the presence and absence of a test compound. If the test compound is an antagonist, reporter activity is expected to decrease relative to that of cells exposed only to the known agonist.

In certain embodiments, compounds provided herein are selective androgen receptor reducing compounds. In certain embodiments, compounds provided herein are selective androgen receptor degrading compounds. Assays for measuring the

amount of androgen receptor are known in the art (*e.g.*, see U.S. Pat. No. 6,861,432).

For example, the following is a model assay that is used to measure the content of androgen receptor protein in cells of the human prostate cell line LNCaP. In a 25 cm^2 cell culture flask, 2 x 10^6 LNCaP cells in 6 ml of RPMI 1640 cell culture medium without phenol red are grown with 4 mmol of glutamine and 5% activated-carbon-treated serum (CCS) and are cultivated overnight at 37°C., 5% CO_2, in a moist atmosphere. On the next day, the cells are treated with the test substance at a concentration of 10 or 1 Tm, whereby the final concentration of the solvent is 0.5% DMSO. As a control, cells are treated only with 0.5% DMSO. After an incubation time of 24 hours, the medium is changed with a renewed addition of substance and another 24 hours of incubation. After 48 hours, the cells are washed with PBS, dissolved with PBS/20 mmol of EDTA, washed again with PBS-CA^{2+}/Mg^{2+} and then frozen for at least two hours as cell pellets at -80°C. Then, the cell pellet is resuspended in 200 Tl of lysis buffer (50 mmol of tris/HCl, pH 7.5; 150 mmol of NaCl, 1.5 mmol of $MgCl_2$, 0.2% SDS, 10% glycerol, 1 mmol of DTT, 0.01X complete-EDTA protease inhibitors (Roche, Mannheim)) and treated with 10 U benzonase (Merck, Darnstadt) for 10 minutes at 4°C. After this time, 5 mmol of EDTA is added, insoluble material is pelletized, and 25 Tg of the cell extract is separated in a 4-12% SDS-polyacrylamide gel (Invitrogen). Then, the proteins are transferred to nitrocellulose (HyBondECL, Amersham) and incubated with monoclonal antibodies against the androgen receptor (AR441; Santa Cruz Biotechnologies; 1:400 dilution) and actin (ICN, 1:5000-1:20,000 dilution). After incubation with the secondary antibodies (anti-mouse IgG-HRP, Amersham or -AP, Invitrogen), the Western blot is developed by chemiluminescence (ECL, Amersham; Western Breeze, Invitrogen), and the light signals are quantified with a ChemiImager3 (Kodak). The amount of androgen receptor is calculated in a ratio to actin as a percentage of the DMSO control.

In certain embodiments, compounds provided herein are used to detect the presence, quantity and/or state of receptors in a sample. In certain of such embodiments, samples are obtained from a subject. In certain embodiments, compounds are radio- or isotopically-labeled. For example, compounds provided herein that selectively bind androgen receptors can be used to determine the presence of such receptors in a sample, such as cell homogenates and lysates.

G. Methods of use of the compounds and compositions

Methods in which the compounds and compositions provided herein employed, such as administered for treatment, also are provided. The methods include in vitro and in vivo uses of the compounds and compositions for altering androgen receptor activity and for treatment, prevention and/or amelioration of one or more symptoms of diseases or disorder that are modulated by androgen receptor activity, or in which androgen receptor activity, is implicated. In certain embodiments, provided herein are methods of treating a subject by administering a compound provided herein. In certain embodiments, such subject exhibits symptoms or signs of a androgen receptor mediated condition. In certain embodiments, a subject is treated prophylactically to reduce or prevent the occurrence of a condition.

The compounds provided herein can be used in the treatment of a variety of conditions including, but not limited to, maintenance of muscle strength and function (*e.g.*, in the elderly); reversal or prevention of frailty or age-related functional decline ("ARFD") in the elderly (*e.g.*, sarcopenia); treatment of catabolic side effects of glucocorticoids; prevention and/or treatment of reduced bone mass, density or growth (*e.g.*, osteoporosis and osteopenia); treatment of chronic fatigue syndrome (CFS); chronic myalgia; treatment of acute fatigue syndrome and muscle loss following elective surgery (*e.g.*, post-surgical rehabilitation); accelerating of wound healing; accelerating bone fracture repair (such as accelerating the recovery of hip fracture patients); accelerating healing of complicated fractures, *e.g.* distraction osteogenesis; in joint replacement; prevention of post-surgical adhesion formation; acceleration of tooth repair or growth; maintenance of sensory function (*e.g.*, hearing, sight, olefaction and taste); treatment of periodontal disease; treatment of wasting secondary to fractures and wasting in connection with chronic obstructive pulmonary disease (COPD), chronic liver disease, AIDS, weightlessness, cancer cachexia, burn and trauma recovery, chronic catabolic state (*e.g.*, coma), eating disorders (*e.g.*, anorexia) and chemotherapy; treatment of cardiomyopathy; treatment of thrombocytopenia; treatment of growth retardation in connection with Crohn's disease; treatment of short bowel syndrome; treatment of irritable bowel syndrome; treatment of inflammatory bowel disease; treatment of Crohn's disease and ulcerative colitis; treatment of complications associated with transplantation; treatment of physiological short stature including

growth hormone deficient children and short stature associated with chronic illness; treatment of obesity and growth retardation associated with obesity; treatment of anorexia (*e.g.*, associated with cachexia or aging); treatment of hypercortisolism and Cushing's syndrome; Paget's disease; treatment of osteoarthritis; induction of pulsatile growth hormone release; treatment of osteochondrodysplasias; treatment of depression, nervousness, irritability and stress; treatment of reduced mental energy and low self-esteem (*e.g.*, motivation/ assertiveness); improvement of cognitive function (*e.g.*, the treatment of dementia, including Alzheimer's disease and short term memory loss); treatment of catabolism in connection with pulmonary dysfunction and ventilator dependency; treatment of cardiac dysfunction (*e.g.*, associated with valvular disease, myocardial infarction, cardiac hypertrophy or congestive heart failure); lowering blood pressure; protection against ventricular dysfunction or prevention of reperfusion events; treatment of adults in chronic dialysis; reversal or slowing of the catabolic state of aging; attenuation or reversal of protein catabolic responses following trauma (*e.g.*, reversal of the catabolic state associated with surgery, congestive heart failure, cardiac myopathy, burns, cancer, COPD etc.); reducing cachexia and protein loss due to chronic illness such as cancer or AIDS; treatment of hyperinsulinemia including nesidioblastosis; treatment of immunosuppressed subjects; treatment of wasting in connection with multiple sclerosis or other neurodegenerative disorders; promotion of myelin repair; maintenance of skin thickness; treatment of metabolic homeostasis and renal homeostasis (*e.g.*, in the frail elderly); stimulation of osteoblasts, bone remodeling and cartilage growth; regulation of food intake; treatment of insulin resistance, including NIDDM, in mammals (*e.g.*, humans); treatment of insulin resistance in the heart; improvement of sleep quality and correction of the relative hyposomatotropism of senescence due to high increase in REM sleep and a decrease in REM latency; treatment of hypothermia; treatment of congestive heart failure; treatment of lipodystrophy (*e.g.*, in subjects taking HIV or AIDS therapies such as protease inhibitors); treatment of muscular atrophy (*e.g.*, due to physical inactivity, bed rest or reduced weight-bearing conditions); treatment of musculoskeletal impairment (*e.g.*, in the elderly); improvement of the overall pulmonary function; treatment of sleep disorders; and the treatment of the catabolic state of prolonged critical illness; treatment of hirsutism, acne, seborrhea, androgenic alopecia, anemia, hyperpilosity,

benign prostate hypertrophy, adenomas and neoplasies of the prostate (*e.g.*, advanced metastatic prostate cancer) and malignant tumor cells containing the androgen receptor, such as is the case for breast, brain, skin, ovarian, bladder, lymphatic, liver and kidney cancers; cancers of the skin, pancreas, endometrium, lung and colon; osteosarcoma; hypercalcemia of malignancy; metastatic bone disease; treatment of spermatogenesis, endometriosis and polycystic ovary syndrome; counteracting preeclampsia, eclampsia of pregnancy and preterm labor; treatment of premenstrual syndrome; treatment of vaginal dryness; age related decreased testosterone levels in men, male menopause, hypogonadism, male hormone replacement, male and female sexual dysfunction (*e.g.*, erectile dysfunction, decreased sex drive, sexual well-being, decreased libido), male and female contraception, hair loss, Reaven's Syndrome and the enhancement of bone and muscle performance/strength. The term treatment also is intended to include prophylactic treatment.

In certain embodiments, the compounds provided herein are used to treat acne, male-pattern baldness, wasting diseases, hirsutism, hypogonadism, osteoporoses, infertility, impotence, obesity, and cancer. In certain embodiments, one or more compounds provided herein are used to stimulate hematopoiesis. In certain embodiments, one or more compounds provided herein are used for contraception.

In certain embodiments, one or more compounds provided herein are used to treat cancer. Certain exemplary cancers include, but are not limited to, breast cancer, colorectal cancer, gastric carcinoma, glioma, head and neck squamous cell carcinoma, papillary renal carcinoma, leukemia, lymphoma, Li-Fraumeni syndrome, malignant pleural mesothelioma, melanoma, multiple myeloma, non-small cell lung cancer, synovial sarcoma, thyroid carcinoma, transitional cell carcinoma of urinary bladder, and prostate cancer, including, but not limited to prostatic hyperplasia.

In certain embodiments, one or more compounds provided herein are used to improve athletic performance. In certain such embodiments, one or more compounds provided herein are used, for example to shorten the time normally needed to recover from physical exertion or to increase muscle strength. Athletes to whom one or more compounds provided herein can be administered include, but are not limited to, horses, dogs, and humans. In certain embodiments, one or more compounds provided herein are administered to an athlete engaged in a professional or recreational

competition, including, but not limited to weight-lifting, body-building, track and field events, and any of various team sports.

In certain embodiments, provided are methods for treating a subject by administering one or more selective androgen receptor agonists and/or partial agonists. Exemplary conditions that can be treated with such selective androgen receptor agonists and/or partial agonist include, but are not limited to, hypogonadism, wasting diseases, cancer cachexia, frailty, infertility, and osteoporosis. In certain embodiments, a selective androgen receptor agonist or partial agonist is used for male hormone replacement therapy. In certain embodiments, one or more selective androgen receptor agonists and/or partial agonists are used to stimulate hematopoiesis. In certain embodiments, a selective androgen receptor agonist or partial agonist is used as an anabolic agent. In certain embodiments, a selective androgen receptor agonist and/or partial agonist is used to improve athletic performance.

In certain embodiments, provided herein are methods for treating a subject by administering one or more selective androgen receptor antagonists and/or partial agonists. Exemplary conditions that can be treated with such one or more selective androgen receptor antagonists and/or partial agonists include, but are not limited to, hirsutism, acne, male-pattern baldness, prostatic hyperplasia, and cancer, including, but not limited to, various hormone-dependent cancers, including, without limitation, prostate and breast cancer.

In certain embodiments, provided herein are methods for treating a subject with prostate cancer. In certain such embodiments, the prostate cancer is androgen dependant prostate cancer. In certain embodiments, the prostate cancer is androgen independent prostate cancer. In certain embodiments, the prostate cancer is androgen independent, but androgen receptor dependant prostate cancer. Administration of compounds provided herein results in a decrease in the amount of functional androgen receptor present in cells. For example, administration of compositions provided herein can result in degradation of androgen receptors.

H. Combination therapies

One or more compounds or compositions provided herein can be co-administered, simultaneously, sequentially or intermittently as a single composition or as separate compositions, with one or more other pharmaceutical agents. In certain

embodiments, such one or more other pharmaceutical agents are designed to treat the same disease or condition as the one or more compounds or pharmaceutical compositions provided herein. In certain embodiments, such one or more other pharmaceutical agents are designed to treat a different disease or condition as the one or more compounds or compositions provided herein. In certain embodiments, such one or more other pharmaceutical agents are designed to treat an undesired effect of one or more compounds or compositions provided herein. In certain embodiments, one or more compounds or compositions provided herein is co-administered with another pharmaceutical agent to treat an undesired effect of that other pharmaceutical agent.

In certain embodiments, compounds or compositions provided herein and one or more other pharmaceutical agents are administered at the same time. In certain embodiments, compounds or compositions provided herein and one or more other pharmaceutical agents are administered at the different times. In certain embodiments, compounds or compositions provided herein and one or more other pharmaceutical agents are prepared together in a single formulation. In certain embodiments, compounds or compositions provided herein and one or more other pharmaceutical agents are prepared separately.

Examples of pharmaceutical agents that can be co-administered with compounds or compositions provided herein include, but are not limited to, analgesics (*e.g.*, acetaminophen); anti-inflammatory agents, including, but not limited to non-steroidal anti-inflammatory drugs (*e.g.*, ibuprofen, COX-1 inhibitors, and COX-2, inhibitors); salicylates; antibiotics; antivirals; antifungal agents; antidiabetic agents (*e.g.*, biguanides, glucosidase inhibitors, insulins, sulfonylureas, and thiazolidenediones); adrenergic modifiers; diuretics; hormones (*e.g.*, anabolic steroids, androgen, estrogen, calcitonin, progestin, somatostan, and thyroid hormones); immunomodulators; muscle relaxants; antihistamines; osteoporosis agents (*e.g.*, biphosphonates, calcitonin, and estrogens); prostaglandins, antineoplastic agents; psychotherapeutic agents; sedatives; poison oak or poison sumac products; antibodies; and vaccines.

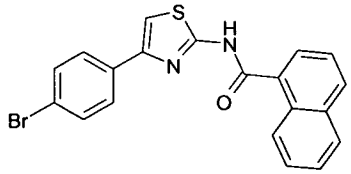
In other embodiments, pharmaceutical agents that can be co-administered with compounds or compositions provided herein include, but are not limited to, other modulators of nuclear hormone receptors or other suitable therapeutic agents useful in the treatment of the aforementioned disorders including: anti-diabetic agents; anti-

osteoporosis agents; anti-obesity agents; anti-inflammatory agents; anti-anxiety agents; anti-depressants; anti-hypertensive agents; anti-platelet agents; anti-thrombotic and thrombolytic agents; cardiac glycosides; cholesterol/lipid lowering agents; mineralocorticoid receptor antagonists; phospodiesterase inhibitors; protein tyrosine kinase inhibitors; thyroid mimetics (including thyroid receptor agonists); anabolic agents; HIV or AIDS therapies; therapies used in the treatment of Alzheimer's and other cognitive disorders; therapies used in the treatment of sleeping disorders; anti-proliferative agents; and anti-tumor agents.

EXAMPLES

The following examples, including experiments and results achieved, are provided for illustrative purposes only and are not to be construed as limiting the claimed subject matter.

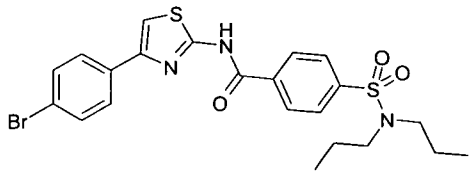
Example 1



N-[4-(4-Bromophenyl)thiazol-2-yl]-1-naphthamide (Compound 101)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.53 (s, 1H), 8.42 (m, 1H), 7.93 (m, 1H), 7.87 (m, 1H), 7.71 (dd, J = 7.1, 1.2 Hz, 1H), 7.61 (ddd, J = 8.3, 6.8, 1.5 Hz, 1H), 7.57 (ddd, J = 8.1, 6.8, 1.5 Hz, 1H), 7.51 (d, J = 8.7 Hz, 2H), 7.40 (dd, J = 8.2, 7.1 Hz, 1H), 7.33 (d, J = 8.7 Hz, 2H), 7.17 (s, 1H).

Example 2

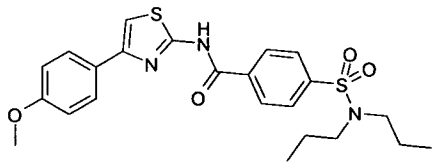


N-[4-(4-Bromophenyl)thiazol-2-yl]-4-dipropylaminosulfonylbenzamide (Compound 102)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.86 (s, 1H), 8.04 (d, J = 8.6 Hz, 2H), 7.94 (d, J = 8.6 Hz, 2H), 7.68 (d, J = 8.6

Hz, 2H), 7.53 (d, J = 8.6 Hz, 2H), 7.24 (s, 1H), 3.12 (m, 4H), 1.56 (sext, J = 7.4 Hz, 4H), 0.88 (t, J = 7.4 Hz, 6H).

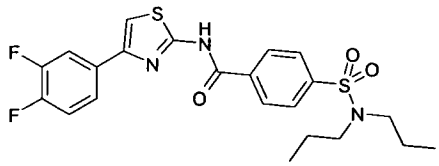
Example 3



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-dipropylaminosulfonylbenzamide (Compound 103)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.45 (s, 1H), 7.96 (d, J = 8.6 Hz, 2H), 7.85 (d, J = 8.6 Hz, 2H), 7.68 (d, J = 8.9 Hz, 2H), 7.10 (s, 1H), 6.89 (d, J = 8.9 Hz, 2H), 3.84 (s, 3H), 3.10 (m, 4H), 1.55 (sext, J = 7.5 Hz, 4H), 0.88 (t, J = 7.5 Hz, 6H).

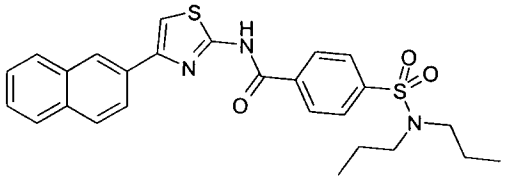
Example 4



N-[4-(3,4-Difluoro-phenyl)-thiazol-2-yl]-4-dipropylsulfamoyl-benzamide (Compound 104)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.68 (s, 1H), 8.06 (d, J = 8.7 Hz, 2H), 7.96 (d, J = 8.7 Hz, 2H), 7.65 (ddd, J = 11.4, 7.7, 2.1 Hz, 1H), 7.54 (dddd, J = 8.4, 4.2, 2.1, 1.5 Hz, 1H), 7.20 (dt, J = 9.9, 8.4 Hz, 1H), 7.19 (s, 1H), 3.13 (m, 4H), 1.57 (sext, J = 7.4 Hz, 4H), 0.89 (t, J = 7.4 Hz, 6H).

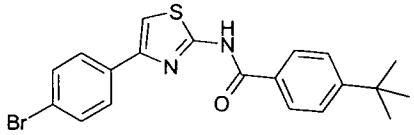
Example 5



N-(4-(2-Naphthyl)thiazol-2-yl)-4-dipropylaminosulfonylbenzamide (Compound 105)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.14 (s, 1H), 8.30 (s, 1H), 8.01 (d, J = 8.4 Hz, 2H), 7.90-7.83 (m, 6H), 7.53-7.46 (m, 2H), 7.37 (s, 1H), 3.09 (m, 4H), 1.55 (sext, J = 7.5 Hz, 4H), 0.88 (t, J = 7.5 Hz, 6H).

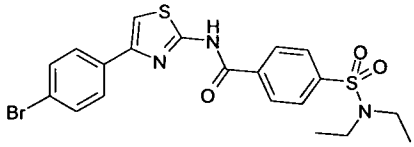
Example 6



N-[4-(4-Bromophenyl)thiazol-2-yl]-4-*tert*-butylbenzamide (Compound 106)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.49 (s, 1H), 7.89 (d, J = 8.6 Hz, 2H), 7.72 (d, J = 8.6 Hz, 2H), 7.55 (d, J = 8.6 Hz, 2H), 7.54 (d, J = 8.6 Hz, 2H), 7.19 (s, 1H), 1.37 (s, 9H).

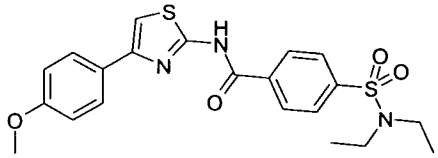
Example 7



N-[4-(4-Bromophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 107)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.99 (s, 1H), 8.02 (d, J = 8.7 Hz, 2H), 7.92 (d, J = 8.7 Hz, 2H), 7.67 (d, J = 8.7 Hz, 2H), 7.52 (d, J = 8.7 Hz, 2H), 7.24 (s, 1H), 3.28 (q, J = 7.2 Hz, 4H), 1.15 (t, J = 7.2 Hz, 6H).

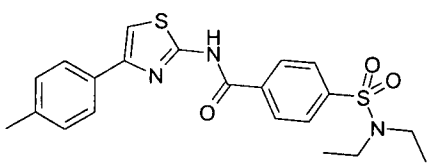
Example 8



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 108)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.30 (s, 1H), 7.99 (d, J = 8.5 Hz, 2H), 7.88 (d, J = 8.5 Hz, 2H), 7.70 (d, J = 8.9 Hz, 2H), 7.10 (s, 1H), 6.91 (d, J = 8.9 Hz, 2H), 3.84 (s, 3H), 3.27 (q, J = 7.1 Hz, 4H), 1.14 (t, J = 7.1 Hz, 6H).

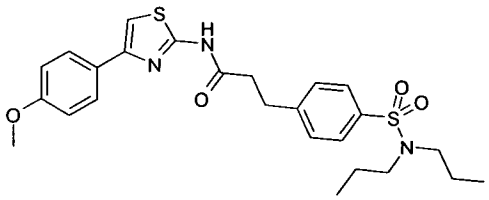
Example 9



N-(4-(4-Methylphenyl)thiazol-2-yl)-4-diethylaminosulfonylbenzamide (Compound 109)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.03 (s, 1H), 8.02 (d, J = 8.5 Hz, 2H), 7.91 (d, J = 8.5 Hz, 2H), 7.69 (d, J = 8.1 Hz, 2H), 7.21 (d, J = 8.1 Hz, 2H), 7.18 (s, 1H), 3.28 (q, J = 7.2 Hz, 4H), 2.38 (s, 3H), 1.15 (t, J = 7.2 Hz, 6H).

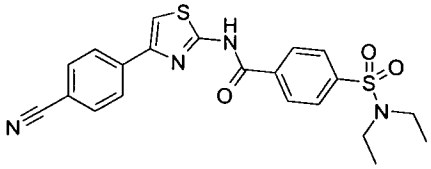
Example 10



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 110)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 11.78 (s, 1H), 7.68 (d, J = 8.8 Hz, 2H), 7.63 (d, J = 8.3 Hz, 2H), 7.01 (s, 1H), 6.97 (d, J = 8.3 Hz, 2H), 6.88 (d, J = 8.8 Hz, 2H), 3.82 (s, 3H), 3.05 (t, J = 7.7 Hz, 4H), 2.85 (t, J = 8.0 Hz, 2H), 2.24 (t, J = 8.0 Hz, 2H), 1.55 (m, 4H), 0.87 (t, J = 7.4 Hz, 6H).

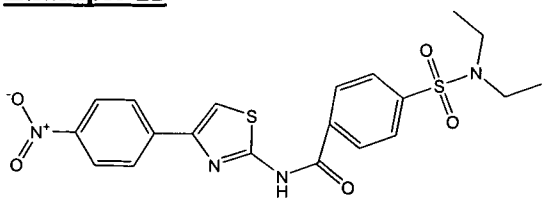
Example 11



N-[4-(4-Cyanophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 111)

This compound was prepared as described in Scheme II. ^{1}H NMR (500 MHz, $CDCl_3$) 9.95 (s, 1H), 8.06 (d, J = 6.8 Hz, 2H), 7.95 (d, J = 8.5 Hz, 2H), 7.92 (d, J = 6.8 Hz, 2H), 7.70 (d, J = 8.5 Hz, 2H), 7.39 (s, 1H), 3.29 (q, J = 7.2 Hz, 4H), 1.16 (t, J = 7.1 Hz, 6H).

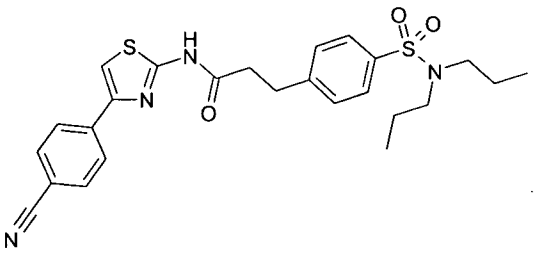
Example 12



N-[4-(4-Nitrophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 112)

This compound was prepared as described in Scheme II. ^{1}H NMR (500 MHz, $CDCl_3$) 9.64 (s, 1H), 8.30 (d, J = 8.8 Hz, 2H), 8.10 (d, J = 8.5 Hz, 2H), 8.00 (m, 4H), 7.45 (s, 1H), 3.30 (q, J = 7.2 Hz, 4H), 1.16 (t, J = 7.1 Hz, 6H).

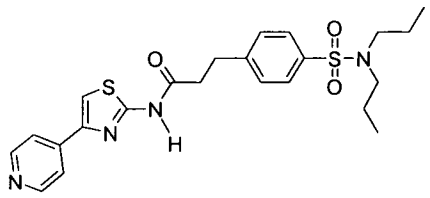
Example 13



N-[4-(4-Cyanophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 113)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.11 (s, 1H), 7.89 (d, J = 8.5 Hz, 2H), 7.73 (d, J = 8.5 Hz, 2H), 7.68 (d, J = 8.5 Hz, 2H), 7.32 (d, J = 8.3 Hz, 2H), 7.30 (s, 1H), 3.14 (t, J = 7.6 Hz, 2H), 3.06 (t, J = 7.7 Hz, 4H), 2.76 (t, 2H), 1.54 (m, 4H), 0.85 (t, J = 7.4 Hz, 6H).

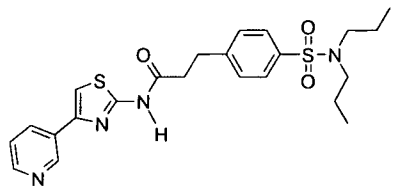
Example 14



N-[4-(4-Pyridyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)propionamide (Compound 114)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, CDCl3) 8.70 (d, J = 5.4 Hz, 2H), 7.75 (d, J = 5.4 Hz, 2H), 7.72 (d, J = 7.9 Hz, 2H), 7.42 (s, 1H), 7.31 (d, J = 7.9 Hz, 2H), 3.14 (t, J = 7.6 Hz, 2H), 3.05 (t, J = 7.4 Hz, 4H), 2.84 (t, J = 7.6 Hz, 2H), 1.53 (sext, J = 7.4 Hz, 4H), 0.84 (t, J = 7.4 Hz, 6H).

Example 15

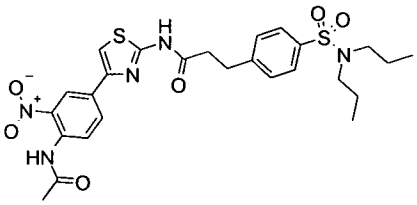


N-[4-(3-Pyridyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)propionamide (Compound 115)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.09 (dd, J = 2.3, 0.8 Hz, 1H), 8.52 (dd, J = 4.7, 1.6 Hz, 1H), 8.21 (ddd, J = 7.9, 2.3, 1.6 Hz, 1H), 7.78 (s, 1H), 7.71 (d, J = 8.2 Hz, 2H), 7.47 (d, J = 8.2 Hz, 2H),

7.45 (ddd, J = 7.9, 4.7, 0.8 Hz, 1H), 3.03 (t, J = 7.6 Hz, 2H), 2.96 (t, J = 7.4 Hz, 4H), 2.82 (t, J = 7.6 Hz, 2H), 1.42 (sext, J = 7.4 Hz, 4H), 0.78 (t, J = 7.4 Hz, 6H).

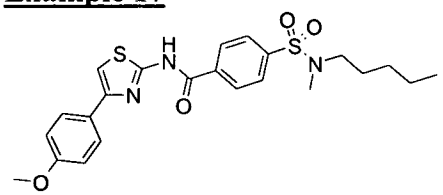
Example 16



N-[4-(4-Acetylamino-3-nitrophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 116)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.37 (s, 1H), 9.01 (s, 1H), 8.82 (d, J = 8.8 Hz, 1H), 8.67 (d, J = 2.2 Hz, 1H), 8.04 (dd, J = 8.8, 2.2 Hz, 1H), 7.75 (d, J = 8.3 Hz, 2H), 7.37 (d, J = 8.3 Hz, 2H), 7.22 (s, 1H), 3.17 (t, J = 7.4 Hz, 2H), 3.05 (m, 4H), 2.83 (t, J = 7.6 Hz, 2H), 2.33 (s, 3H), 1.53 (m, 4H), 0.85 (t, J = 7.4 Hz, 6H).

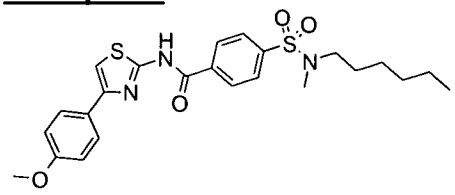
Example 17



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N-methyl-N-pentylaminosulfonyl)-benzamide (Compound 117)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.47 (s, 1H), 7.98 (d, J = 8.3 Hz, 2H), 7.82 (d, J = 8.3 Hz, 2H), 7.68 (d, J = 8.8 Hz, 2H), 7.10 (s, 1H), 6.89 (d, J = 9.0 Hz, 2H), 3.84 (s, 3H), 3.01 (t, J = 7.3 Hz, 2H), 2.74 (s, 3H), 1.54 (m, 2H), 1.31 (m, 4H), 0.90 (t, J = 7.0 Hz, 3H).

Example 18

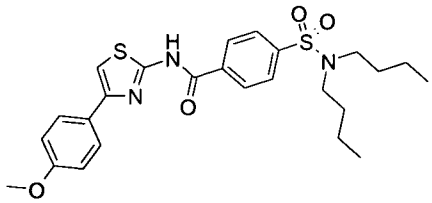


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N-methyl-N-hexylaminosulfonyl)-benzamide (Compound 118)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.65 (s, 1H), 7.96 (d, J = 8.3 Hz, 2H), 7.79 (d, J = 8.1 Hz, 2H), 7.66 (d, J =

8.8 Hz, 2H), 7.10 (s, 1H), 6.87 (d, J = 8.8 Hz, 2H), 3.83 (s, 3H), 3.00 (t, J = 7.3 Hz, 2H), 2.73 (s, 3H), 1.53 (m, 2H), 1.30 (m, 6H), 0.89 (t, J = 7.0 Hz, 3H).

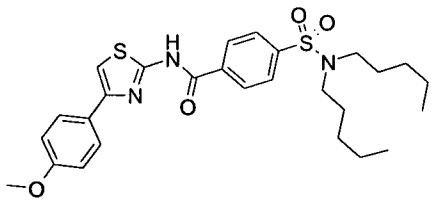
Example 19



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dibutylaminosulfonyl)benzamide (Compound 119)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.56 (s, 1H), 7.94 (d, J = 8.5 Hz, 2H), 7.82 (d, J = 8.5 Hz, 2H), 7.66 (d, J = 9.0 Hz, 2H), 7.09 (s, 1H), 6.88 (d, J = 9.0 Hz, 2H), 3.83 (s, 3H), 3.12 (t, J = 7.7 Hz, 4H), 1.50 (m, 4H), 1.29 (m, 4H), 0.90 (t, J = 7.3 Hz, 6H).

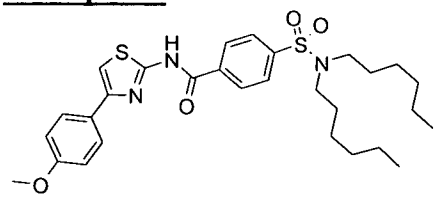
Example 20



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dipentylaminosulfonyl)benzamide (Compound 120)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.07 (s, 1H), 8.01 (d, J = 8.3 Hz, 2H), 7.89 (d, J = 8.5 Hz, 2H), 7.71 (d, J = 8.8 Hz, 2H), 7.10 (s, 1H), 6.92 (d, J = 8.8 Hz, 2H), 3.85 (s, 3H), 3.11 (m, 2H), 2.95 (m, 2H), 1.66 (m, 1H), 1.49 (m, 4H), 1.27 (m, 4H), 1.09 (m, 1H), 0.88 (m, 8H).

Example 21

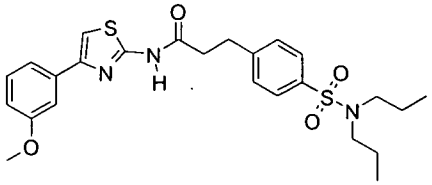


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dihexylaminosulfonyl)benzamide (Compound 121)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.80 (s, 1H), 7.93 (d, J = 8.5 Hz, 2H), 7.80 (d, J = 8.5 Hz, 2H), 7.65 (d, J =

8.8 Hz, 2H), 7.09 (s, 1H), 6.87 (d, J = 8.8 Hz, 2H), 3.83 (s, 3H), 3.10 (t, J = 7.7 Hz, 4H), 1.50 (m, 4H), 1.26 (m, 12H), 0.88 (t, J = 6.9 Hz, 6H).

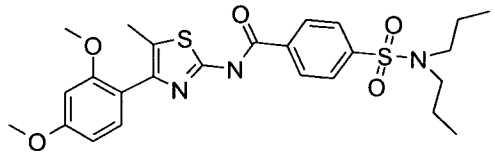
Example 22



N-[4-(3-Methoxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 122)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.76 (s, 1H), 7.62 (d, J = 8.3 Hz, 2H), 7.36 (ddd, J = 7.9, 1.5, 0.8 Hz, 1H), 7.30 (dd, J = 2.5, 1.5 Hz, 1H), 7.29 (t, J = 7.9 Hz, 1H), 7.15 (s, 1H), 6.96 (d, J = 8.3 Hz, 2H), 6.86 (ddd, J = 7.9, 2.5, 0.8 Hz, 1H), 3.79 (s, 3H), 3.04 (t, J = 7.5 Hz, 4H), 2.85 (t, J = 8.0 Hz, 2H), 2.27 (t, J = 8.0 Hz, 2H), 1.54 (sext, J = 7.5 Hz, 4H), 0.86 (t, J = 7.5 Hz, 6H).

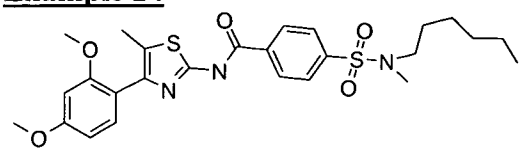
Example 23



N-[4-(2,4-Dimethoxyphenyl)-5-methylthiazol-2-yl]-4-N,N-dipropylaminosulfonyl-phenyl)benzamide (Compound 123)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 12.20 (s, 1H), 7.87 (d, J = 8.5 Hz, 2H), 7.71 (d, J = 8.5 Hz, 2H), 7.02 (d, J = 8.3 Hz, 1H), 6.31 (dd, J = 8.3, 2.3 Hz, 1H), 6.23 (d, J = 2.3 Hz, 1H), 3.78 (s, 3H), 3.72 (s, 3H), 3.06 (t, J = 7.5 Hz, 4H), 2.28 (s, 3H), 1.52 (sext, J = 7.5 Hz, 4H), 0.85 (t, J = 7.5 Hz, 6H).

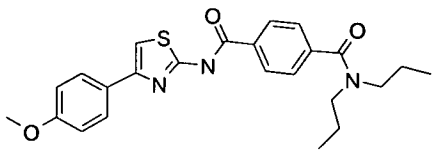
Example 24



N-[4-(2,4-Dimethoxyphenyl)-5-methylthiazol-2-yl]-4-N-methyl-N-hexylamino-sulfonylphenyl)benzamide (Compound 124)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 12.68 (s, 1H), 7.85 (d, J = 8.5 Hz, 2H), 7.65 (d, J = 8.5 Hz, 2H), 6.98 (d, J = 8.4 Hz, 1H), 6.26 (dd, J = 8.4, 2.3 Hz, 1H), 6.18 (d, J = 2.3 Hz, 1H), 3.77 (s, 3H), 3.70 (s, 3H), 2.95 (t, J = 7.3 Hz, 2H), 2.69 (s, 3H), 2.28 (s, 3H), 1.49 (m, 2H), 1.33-1.24 (m, 6H), 0.87 (t, J = 6.7 Hz, 3H).

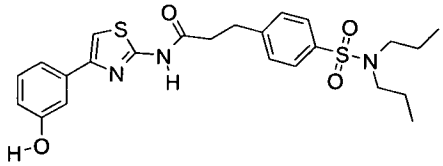
Example 25



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N',N'-dipropylaminocarbonyl-1,4-benzenedicarboxamide (Compound 125)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.02 (s, 1H), 7.94 (d, J = 8.1 Hz, 2H), 7.76 (d, J = 8.9 Hz, 2H), 7.44 (d, J = 8.1 Hz, 2H), 7.08 (s, 1H), 6.94 (d, J = 8.9 Hz, 2H), 3.85 (s, 3H), 3.49 (t, J = 7.4 Hz, 2H), 3.12 (t, J = 7.4 Hz, 2H), 1.71 (m, 2H), 1.53 (m, 2H), 0.99 (t, J = 7.4 Hz, 3H), 0.74 (t, J = 7.4 Hz, 3H).

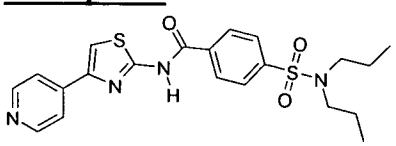
Example 26



N-[4-(3-Hydroxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 126)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 11.45 (s, 1H), 7.64 (d, J = 8.3 Hz, 2H), 7.27 (ddd, J = 7.9, 1.5, 0.8 Hz, 1H), 7.17 (t, J = 7.9 Hz, 1H), 7.15 (dd, J = 2.4, 1.5 Hz, 1H), 7.05 (s, 1H), 6.99 (d, J = 8.3 Hz, 2H), 6.73 (ddd, J = 7.9, 2.4, 0.8 Hz, 1H), 3.07 (t, J = 7.5 Hz, 4H), 2.88 (t, J = 7.9 Hz, 2H), 2.31 (t, J = 7.9 Hz, 2H), 1.55 (sext, J = 7.5 Hz, 4H), 0.86 (t, J = 7.5 Hz, 6H).

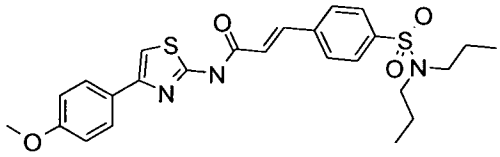
Example 27



N-(4-(4-Pyridinyl)thiazol-2-yl)-4-dipropylaminosulfonylbenzamide (Compound 127)

This compound was prepared as described in Scheme II. ^{1}H NMR (500 MHz, $CDCl_3$) 13.13 (s, 1H), 8.65 (dd, J = 4.5, 1.6 Hz, 2H), 8.30 (d, J = 8.7 Hz, 2H), 8.09 (s, 1H), 7.97 (d, J = 8.7 Hz, 2H), 7.90 (dd, J = 4.5, 1.6 Hz, 2H), 3.09 (t, J = 7.4 Hz, 4H), 1.49 (sext, J = 7.4 Hz, 4H), 0.82 (t, J = 7.4 Hz, 6H).

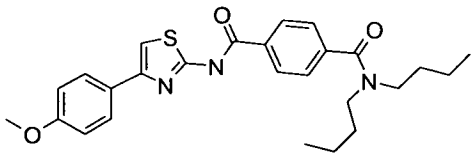
Example 28



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-(4-dipropylaminosulfonylphenyl)-acrylamide (Compound 128)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.61 (s, 1H), 7.88 (d, J = 8.5 Hz, 2H), 7.85 (d, J = 8.8 Hz, 2H), 7.84 (d, J = 8.5 Hz, 2H), 7.80 (d, J = 15.9 Hz, 1H), 7.53 (s, 1H), 7.06 (d, J = 15.9 Hz, 1H), 7.01 (d, J = 8.8 Hz, 2H), 3.80 (s, 3H), 3.05 (t, J = 7.5 Hz, 4H), 1.48 (sext, J = 7.5 Hz, 4H), 0.82 (t, J = 7.5 Hz, 6H).

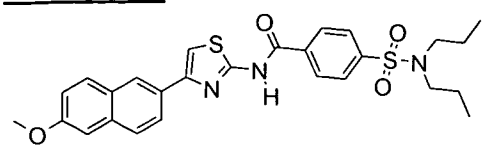
Example 29



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N',N'-dibutylaminocarbonyl-1,4-benzenedicarboxamide (Compound 129)

This compound was prepared as described in Scheme I. ^{1}H NMR (300MHz, $CDCl_3$) 10.05 (s, 1H), 7.93 (d, J = 8.5 Hz, 2H), 7.75 (d, J = 8.9 Hz, 2H), 7.44 (d, J = 8.5 Hz, 2H), 7.08 (s, 1H), 6.93 (d, J = 8.9 Hz, 2H), 3.84 (s, 3H), 3.51 (t, J = 7.5 Hz, 2H), 3.14 (t, J = 7.4 Hz, 2H), 1.66 (m, 2H), 1.54-1.34 (m, 4H), 1.12 (m, 2H), 0.99 (t, J = 7.3 Hz, 3H), 0.79 (t, J = 7.4 Hz, 3H).

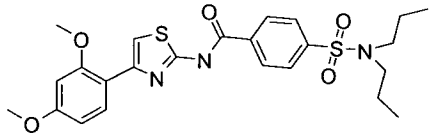
Example 30



N-[4-(6-Methoxy-2-naphthyl)thiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)-benzamide (Compound 130)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 13.07 (s, 1H), 8.42 (d, J = 1.6 Hz, 1H), 8.31 (d, J = 8.6 Hz, 2H), 8.05 (dd, J = 8.6, 1.6 Hz, 1H), 7.97 (d, J = 8.6 Hz, 2H), 7.88 (d, J = 9.0 Hz, 1H), 7.88 (d, J = 8.6 Hz, 1H), 7.78 (br s, 1H), 7.35 (d, J = 2.5 Hz, 1H), 7.19 (dd, J = 9.0, 2.5 Hz, 1H), 3.90 (s, 3H), 3.09 (t, J = 7.5 Hz, 4H), 1.50 (sext, J = 7.5 Hz, 4H), 0.83 (t, J = 7.5 Hz, 6H).

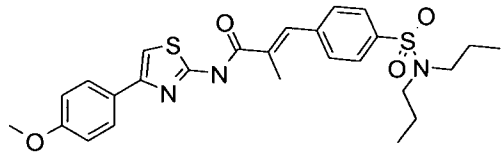
Example 31



N-[4-(2,4-Dimethoxyphenyl)thiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)benzamide (Compound 131)

This compound was prepared as described in Scheme I. ^{1}H NMR (300 MHz, $CDCl_3$) 11.56 (s, 1H), 7.84 (d, J = 8.6 Hz, 2H), 7.71 (d, J = 8.6 Hz, 2H), 7.71 (d, J = 8.5 Hz, 1H), 7.46 (s, 1H), 6.42 (d, J = 2.3 Hz, 1H), 6.38 (dd, J = 8.5, 2.3 Hz, 1H), 3.92 (s, 3H), 3.80 (s, 3H), 3.05 (t, J = 7.5 Hz, 4H), 1.52 (sext, J = 7.5 Hz, 4H), 0.85 (t, J = 7.5 Hz, 6H).

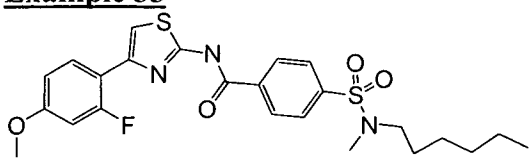
Example 32



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-(4-dipropylaminosulfonylphenyl)-2-methylacrylamide (Compound 132)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 11.56 (s, 1H), 7.84 (d, J = 8.6 Hz, 2H), 7.71 (d, J = 8.6 Hz, 2H), 7.71 (d, J = 8.5 Hz, 1H), 7.46 (s, 1H), 6.42 (d, J = 2.3 Hz, 1H), 6.38 (dd, J = 8.5, 2.3 Hz, 1H), 3.92 (s, 3H), 3.80 (s, 3H), 3.05 (t, J = 7.5 Hz, 4H), 1.52 (sext, J = 7.5 Hz, 4H), 0.85 (t, J = 7.5 Hz, 6H).

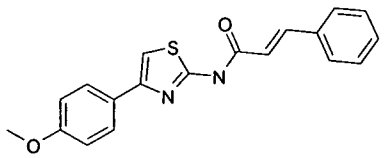
Example 33



N-[4-(2-Fluoro-4-methoxyphenyl)thiazol-2-yl]-4-N-methyl-N-hexylamino-sulfonylphenyl)benzamide (Compound 133)

This compound was prepared as described in Scheme II. ^{1}H NMR (300MHz, DMSO) 13.04 (s, 1H), 8.32 (d, J = 8.6 Hz, 2H), 8.02 (t, J = 8.7 Hz, 1H), 7.93 (d, J = 8.6 Hz, 2H), 7.47 (d, J = 2.6 Hz, 1H), 6.97 (dd, J = 13.4, 2.5 Hz, 1H), 6.92 (dd, J = 8.7, 2.5 Hz, 1H), 3.82 (s, 3H), 2.99 (t, J = 7.1 Hz, 2H), 2.70 (s, 3H), 1.47 (m, 2H), 1.30-1.23 (m, 6H), 0.86 (t, J = 6.6 Hz, 3H).

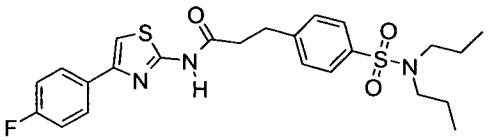
Example 34



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-phenylacrylamide (Compound 134)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.32 (s, 1H), 7.83 (d, J = 8.7 Hz, 2H), 7.72 (d, J = 15.6 Hz, 1H), 7.36 (t, J = 7.4 Hz, 1H), 7.30 (t, J = 7.4 Hz, 2H), 7.17 (d, J = 7.4 Hz, 2H), 7.13 (s, 1H), 6.90 (d, J = 8.7 Hz, 2H), 6.22 (d, J = 15.6 Hz, 1H), 3.72 (s, 3H).

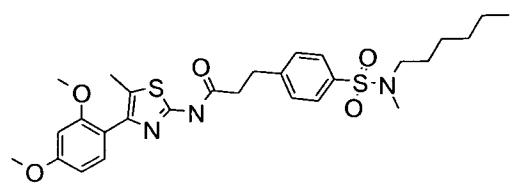
Example 35



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 135)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.26 (br s, 1H), 7.91 (dd, J = 8.9, 5.5 Hz, 2H), 7.70 (d, J = 8.4 Hz, 2H), 7.59 (s, 1H), 7.47 (d, J = 8.4 Hz, 2H), 7.26 (t, J = 8.9 Hz, 2H), 3.03 (t, J = 7.6 Hz, 2H), 2.96 (t, J = 7.5 Hz, 4H), 2.81 (t, J = 7.6 Hz, 2H), 1.42 (sext, J = 7.5 Hz, 4H), 0.78 (t, J = 7.5 Hz, 6H).

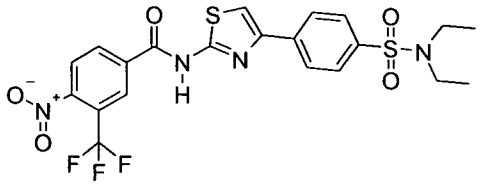
Example 36



N-[4-(2,4-Dimethoxyphenyl)thiazol-2-yl]-3-(4-N-methyl-N-hexylamino-sulfonylphenyl)propionamide (Compound 136)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 7.67 (d, J = 8.2 Hz, 2H), 7.21 (d, J = 8.2 Hz, 2H), 7.20 (d, J = 8.3 Hz, 1H), 6.47 (dd, J = 8.3, 2.3 Hz, 1H), 6.34 (d, J = 2.3 Hz, 1H), 3.82 (s, 3H), 3.61 (s, 3H), 2.97 (t, J = 7.3 Hz, 2H), 2.87 (t, J = 7.8 Hz, 2H), 2.70 (s, 3H), 2.23 (s, 3H), 2.13 (t, J = 7.8 Hz, 2H), 1.51 (m, 2H), 1.35-1.23 (m, 6H), 0.88 (t, J = 6.7 Hz, 3H).

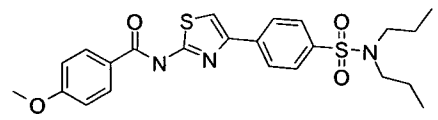
Example 37



N-[4-(Diethylaminosulfonylphenyl)thiazol-2-yl]-4-nitro-3-trifluoromethyl-benzamide (Compound 137)

This compound was prepared as described in Scheme II. ^{1}H NMR (300MHz, DMSO) 13.40 (s, 1H), 8.73 (d, J = 1.7 Hz, 1H), 8.60 (dd, J = 8.4, 1.7 Hz, 1H), 8.35 (d, J = 8.4 Hz, 1H), 8.16 (d, J = 8.6 Hz, 2H), 7.99 (s, 1H), 7.87 (d, J = 8.6 Hz, 2H), 3.20 (q, J = 7.1 Hz, 4H), 1.06 (t, J = 7.1 Hz, 6H).

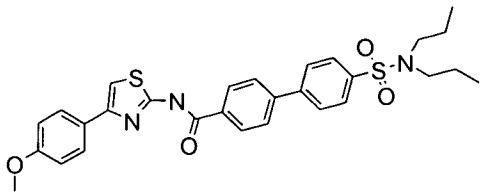
Example 38



N-[4-(Dipropylaminosulfonylphenyl)thiazol-2-yl]-4-methoxybenzamide (Compound 138)

This compound was prepared as described in Scheme II. ^{1}H NMR (300MHz, $CDCl_3$) 10.08 (s, 1H), 7.93 (d, J = 8.4 Hz, 2H), 7.93 (d, J = 8.8 Hz, 2H), 7.83 (d, J = 8.4 Hz, 2H), 7.31 (s, 1H), 6.97 (d, J = 8.8 Hz, 2H), 3.89 (s, 3H), 3.09 (t, J = 7.5 Hz, 4H), 1.55 (sext, J = 7.5 Hz, 4H), 0.87 (t, J = 7.5 Hz, 6H).

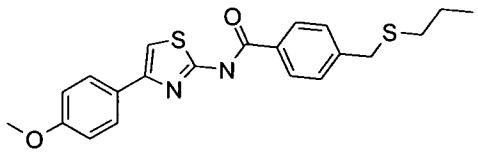
Example 39



N-[4-Methoxyphenyl)thiazol-2-yl]-4-(4-dipropylaminosulfonylphenyl)-benzamide (Compound 139)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.05 (s, 1H), 8.02 (d, J = 8.5 Hz, 2H), 7.92 (d, J = 8.5 Hz, 2H), 7.74 (d, J = 8.5 Hz, 2H), 7.73 (d, J = 8.9 Hz, 2H), 7.71 (d, J = 8.5 Hz, 2H), 7.09 (s, 1H), 6.91 (d, J = 8.9 Hz, 2H), 3.83 (s, 3H), 3.13 (t, J = 7.5 Hz, 4H), 1.60 (sext, J = 7.5 Hz, 4H), 0.90 (t, J = 7.5 Hz, 6H).

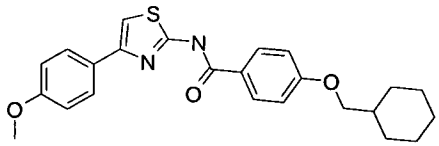
Example 40



N-[4-Methoxyphenyl)thiazol-2-yl]-4-propylthiomethylbenzamide (Compound 140)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.57 (s, 1H), 7.90 (d, J = 8.1 Hz, 2H), 7.77 (d, J = 8.8 Hz, 2H), 7.47 (d, J = 8.1 Hz, 2H), 7.07 (s, 1H), 6.95 (d, J = 8.8 Hz, 2H), 3.85 (s, 3H), 3.76 (s, 2H), 2.40 (t, J = 7.3 Hz, 2H), 1.59 (sext, J = 7.3 Hz, 2H), 0.97 (t, J = 7.3 Hz, 3H).

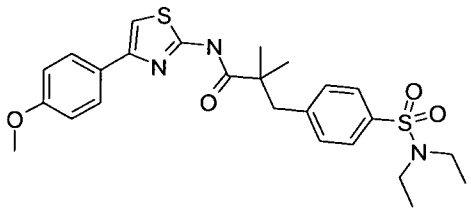
Example 41



N-(4-(4-Methoxyphenyl)thiazol-2-yl)-4-cyclohexymethoxybenzamide (Compound 141)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.41 (s, 1H), 7.90 (d, J = 9.0 Hz, 2H), 7.77 (d, J = 9.0 Hz, 2H), 7.04 (s, 1H), 6.99 (d, J = 8.8 Hz, 2H), 6.95 (d, J = 8.8 Hz, 2H), 3.85 (s, 3H), 3.83 (d, J = 6.3 Hz, 2H), 1.92-1.69 (m, 6H), 1.37-1.17 (m, 3H), 1.08 (m, 2H).

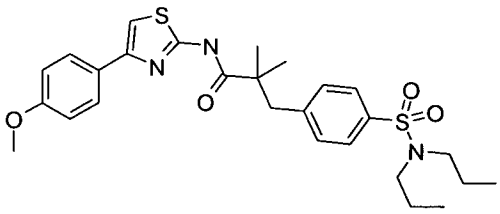
Example 42



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-diethylaminosulfonyl-phenyl)propionamide (Compound 142)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.13 (br s, 1H), 7.68 (d, J = 8.4 Hz, 2H), 7.68 (d, J = 8.9 Hz, 2H), 7.25 (d, J = 8.4 Hz, 2H), 7.00 (s, 1H), 6.93 (d, J = 8.9 Hz, 2H), 3.84 (s, 3H), 3.16 (q, J = 7.2 Hz, 4H), 3.03 (s, 2H), 1.35 (s, 6H), 1.05 (t, J = 7.2 Hz, 6H).

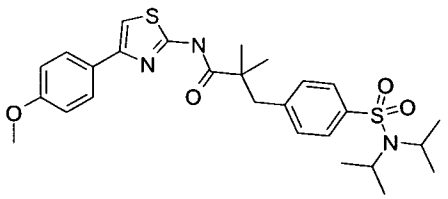
Example 43



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-dipropylaminosulfonyl-phenyl)propionamide (Compound 143)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.75 (br s, 1H), 7.68 (d, J = 8.4 Hz, 2H), 7.67 (d, J = 8.8 Hz, 2H), 7.25 (d, J = 8.4 Hz, 2H), 6.99 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 3.84 (s, 3H), 3.03 (s, 2H), 3.01 (m, 4H), 1.49 (sext, J = 7.5 Hz, 4H), 1.33 (s, 6H), 0.82 (t, J = 7.5 Hz, 6H).

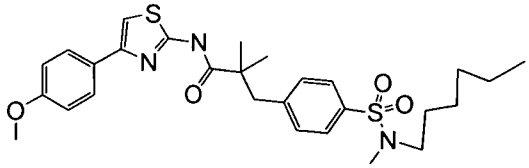
Example 44



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-N,N-bisisopropylamino-sulfonylphenyl)propionamide (Compound 144)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.03 (br s, 1H), 7.74 (d, J = 8.4 Hz, 2H), 7.70 (d, J = 8.9 Hz, 2H), 7.22 (d, J = 8.4 Hz, 2H), 7.00 (s, 1H), 6.93 (d, J = 8.9 Hz, 2H), 3.84 (s, 3H), 3.64 (sept, J = 6.8 Hz, 2H), 3.02 (s, 2H), 1.34 (s, 6H), 1.20 (d, J = 6.8 Hz, 12H).

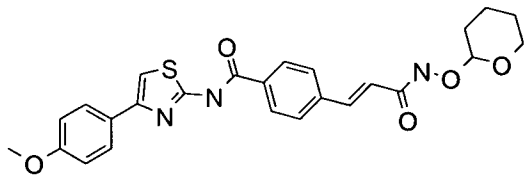
Example 45



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-N-methyl-N-hexylamino-sulfonylphenyl)propionamide (Compound 145)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.27 (s, 1H), 7.65 (d, J = 8.4 Hz, 2H), 7.64 (d, J = 8.9 Hz, 2H), 7.28 (d, J = 8.4 Hz, 2H), 6.97 (s, 1H), 6.94 (d, J = 8.9 Hz, 2H), 3.85 (s, 3H), 3.04 (s, 2H), 2.93 (m, 2H), 2.65 (s, 3H), 1.46 (m, 2H), 1.33 (s, 6H), 1.31-1.23 (m, 6H), 0.87 (t, J = 7.0 Hz, 3H).

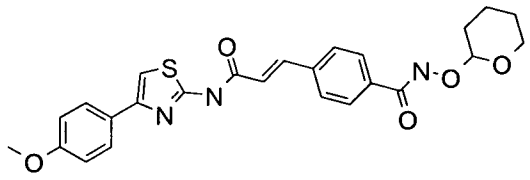
Example 46



(±)-N-(2-Tetrahydropyrano)oxa-3(E)-(4-(4-(4-methoxyphenyl)thiazol-2-yl)amino-carbonylphenyl)acrylamide (Compound 146)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.79 (s, 1H), 11.34 (s, 1H), 8.16 (d, J = 8.3 Hz, 2H), 7.89 (d, J = 8.8 Hz, 2H), 7.75 (d, J = 8.3 Hz, 2H), 7.58 (d, J = 15.8 Hz, 1H), 7.54 (s, 1H), 7.01 (d, J = 8.8 Hz, 2H), 6.65 (d, J = 15.8 Hz, 1H), 4.94 (s, 1H), 3.98 (m, 1H), 3.80 (s, 3H), 3.55 (m, 1H), 1.76-1.67 (m, 3H), 1.61-1.51 (m, 3H).

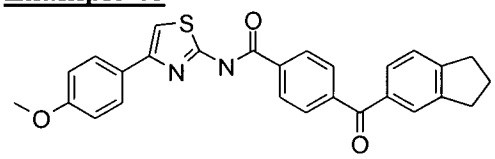
Example 47



(±)-N-(4-Methoxyphenyl)thiazol-2-yl)-3(E)-(4-(2-tetrahydropyrano)oxa-amino-carbonylphenyl)acrylamide (Compound 147)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, DMSO) 7.85 (d, J = 8.9 Hz, 2H), 7.85 (d, J = 8.3 Hz, 2H), 7.77 (d, J = 15.7 Hz, 1H), 7.73 (d, J = 8.3 Hz, 2H), 7.52 (s, 1H), 7.02 (d, J = 15.7 Hz, 1H), 7.00 (d, J = 8.9 Hz, 2H), 5.02 (s, 1H), 4.07 (m, 1H), 3.80 (s, 3H), 3.54 (m, 1H), 1.77-1.70 (m, 3H), 1.62-1.50 (m, 3H).

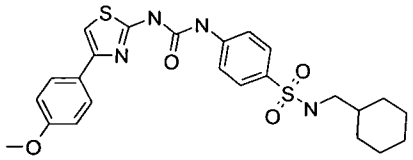
Example 48



N-(4-Methoxyphenyl)thiazol-2-yl)-4-(6-indano)carbonylbenzamide (Compound 148)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 12.95 (s, 1H), 8.27 (d, J = 8.5 Hz, 2H), 7.90 (d, J = 8.8 Hz, 2H), 7.84 (d, J = 8.5 Hz, 2H), 7.64 (m, 1H), 7.57 (s, 1H), 7.56 (dd, J = 7.9, 1.6 Hz, 1H), 7.43 (d, J = 7.9 Hz, 1H), 7.02 (d, J = 8.8 Hz, 2H), 3.80 (s, 3H), 2.96 (t, J = 7.3 Hz, 2H), 2.94 (t, J = 7.3 Hz, 2H), 2.08 (qn, J = 7.3 Hz, 2H).

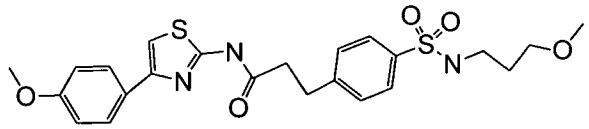
Example 49



N-(4-(4-Methoxyphenyl)-2-thiazolyl)-N'-(4-cyclohexylmethylaminosulfonyl)-phenylurea (Compound 149)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 10.82 (s, 1H), 9.33 (s, 1H), 7.82 (d, J = 9.0 Hz, 2H), 7.73 (d, J = 9.0 Hz, 2H), 7.67 (d, J = 9.0 Hz, 2H), 7.46 (t, J = 6.3 Hz, 1H), 7.42 (s, 1H), 6.99 (d, J = 9.0 Hz, 2H), 3.79 (s, 3H), 2.54 (t, J = 6.3 Hz, 2H), 1.67-1.54 (m, 5H), 1.32 (m, 1H), 1.17-1.05 (m, 3H), 0.79 (m, 2H).

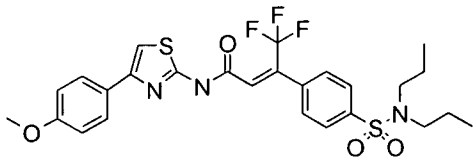
Example 50



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(3-methoxypropyl)aminosulfonylphenyl)-propionamide (Compound 150)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.42 (s, 1H), 7.69 (d, J = 8.3 Hz, 2H), 7.64 (d, J = 8.9 Hz, 2H), 7.08 (d, J = 8.3 Hz, 2H), 7.00 (s, 1H), 6.87 (d, J = 8.9 Hz, 2H), 5.40 (t, J = 6.0 Hz, 1H), 3.81 (s, 3H), 3.36 (t, J = 5.6 Hz, 2H), 3.25 (s, 3H), 3.03 (q, J = 6.0 Hz, 2H), 2.92 (t, J = 7.7 Hz, 2H), 2.37 (t, J = 7.7 Hz, 2H), 1.66 (m, 2H).

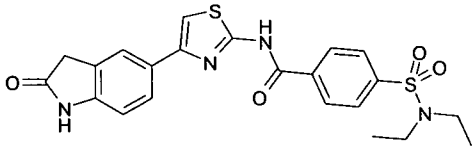
Example 51



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-trifluoromethyl-3-(4-dipropylamino-sulfonylphenyl)acrylamide (Compound 151)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.80 (s, 1H), 7.86 (d, J = 8.4 Hz, 2H), 7.80 (d, J = 9.0 Hz, 2H), 7.57 (d, J = 8.4 Hz, 2H), 7.51 (s, 1H), 7.22 (q, J = 1.2 Hz, 1H), 6.98 (d, J = 9.0 Hz, 2H), 3.78 (s, 3H), 3.02 (t, J = 7.5 Hz, 4H), 1.42 (sext, J = 7.5 Hz, 4H), 0.77 (t, J = 7.5 Hz, 6H).

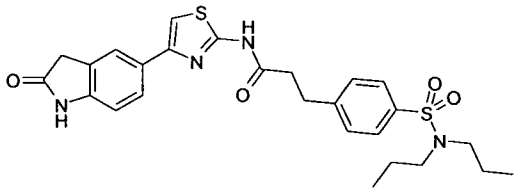
Example 52



N-[4-(2-Oxo-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-4-diethylaminosulfonyl-benzamide (Compound 152)

This compound was prepared as described in Scheme II. ^{1}H NMR (500 MHz, DMSO-d_6) 12.98 (s, 1H), 10.51 (s, 1H), 8.29 (d, J = 8.7 Hz, 2H), 7.96 (d, J = 8.7 Hz, 2H), 7.81-7.78 (m, 2H), 7.56 (s, 1H), 6.88 (d, J = 8.5 Hz, 1H), 3.56 (s, 2H), 3.22 (q, J = 7.1 Hz, 4H), 1.06 (t, J = 7.1 Hz, 6H).

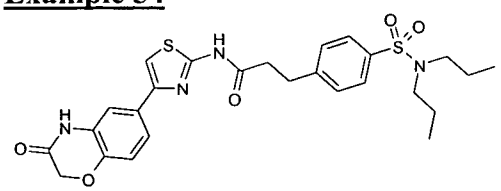
Example 53



N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 153)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO-d_6) 12.22 (s, 1H), 10.48 (s, 1H), 7.72-7.70 (m, 2H), 7.71 (d, J = 8.4 Hz, 2H), 7.47 (d, J = 8.4 Hz, 2H), 7.42 (s, 1H), 6.85 (d, J = 8.7 Hz, 1H), 3.53 (s, 2H), 3.03 (t, J = 7.6 Hz, 2H), 2.96 (t, J = 7.5 Hz, 4H), 2.81 (t, J = 7.6 Hz, 2H), 1.43 (m, 4H), 0.78 (t, J = 7.5 Hz, 6H).

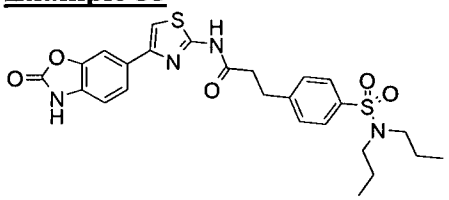
Example 54



N-[4-(3,4-Dihydro-3-oxo-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 154)

This compound was prepared as described in Scheme III. ^{1}H NMR (300 MHz, $CDCl_3$) 10.46 (s, 1H), 8.93 (s, 1H), 7.76 (d, J = 8.4 Hz, 2H), 7.39 (d, J = 8.3 Hz, 2H), 7.20 (dd, J = 8.5, 1.9 Hz, 1H), 6.82 (d, J = 1.7 Hz, 1H), 6.79 (s, 1H), 6.75 (d, J = 8.5 Hz, 1H), 4.38 (s, 2H), 3.17 (t, 2H), 3.04 (m, 4H), 2.83 (t, J = 7.4 Hz, 2H), 1.52 (m, 9H), 0.85 (t, J = 7.4 Hz, 6H).

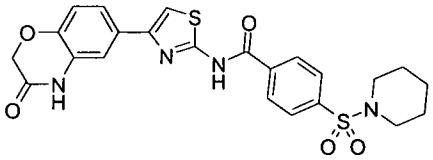
Example 55



N-[4-(2,3-Dihydro-2-oxobenzoxazin-6-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 155)

This compound was prepared as described in Scheme III. ^{1}H NMR (300 MHz, $CDCl_3$) 7.73 (d, J = 8.4 Hz, 2H), 7.63 (d, J = 1.0 Hz, 1H), 7.58 (dd, J = 8.1, 1.5 Hz, 1H), 7.39 (d, J = 8.5 Hz, 2H), 7.05 (m, 2H), 3.15 (t, J = 7.6 Hz, 2H), 3.04 (m, 4H), 2.82 (t, 3H), 1.53 (m, 4H), 0.86 (t, J = 7.3 Hz, 6H).

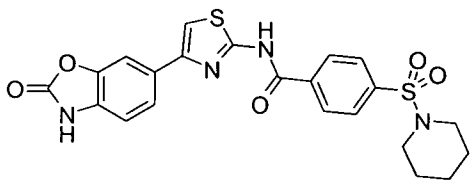
Example 56



N-[4-(3-Oxo-3,4-dihydro-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-4-(1-piperidine-sulfonyl)benzamide (Compound 156)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 8.20 (d, J = 8.5 Hz, 1H), 7.92 (dd, J = 8.4, 1.6 Hz, 2H), 7.42 (dd, J = 8.3, 2.0 Hz, 1H), 7.35 (s, 1H), 7.14 (s, 1H), 7.01 (dd, J = 8.4, 1.3 Hz, 1H), 3.44 (d, J = 2.7 Hz, 2H), 3.05 (m, 4H), 1.67 (m, 4H), 1.45 (m, 2H).

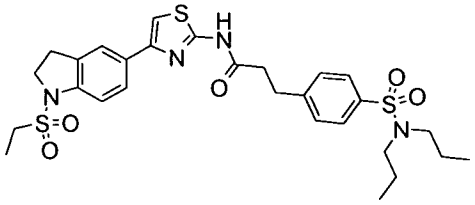
Example 57



N-[4-(2-Oxo-2,3-dihydrobenzooxazol-6-yl)thiazol-2-yl]-4-(1-piperidinesulfonyl)-benzamide (Compound 157)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 8.21 (d, J = 8.5 Hz, 2H), 7.91 (d, J = 8.5 Hz, 2H), 7.70 (m, 2H), 7.65 (dd, J = 8.1, 1.5 Hz, 1H), 7.36 (d, J = 8.3 Hz, 1H), 7.18 (s, 1H), 7.09 (d, J = 8.3 Hz, 1H), 3.05 (m, 4H), 1.67 (m, 4H), 1.46 (m, 2H).

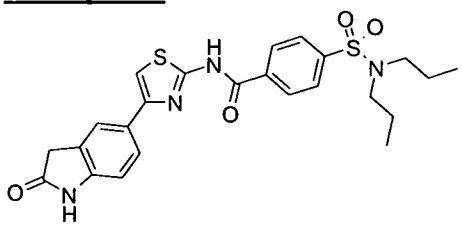
Example 58



N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 158)

This compound was prepared as described in Scheme II. ^{1}H NMR (500 MHz, $CDCl_3$) (d, J =8.3 Hz, 1H), 7.22 (d, J = 8.3 Hz, 2H), 7.04 (s, 1H), 4.07 (t, J = 8.7 Hz, 2H), 3.15 (t, J = 8.7 Hz, 2H), 3.10 (q, J = 7.5 Hz, 2H), 3.01 (m, 4H), 2.59 (t, 2H), 1.52 (m, 4H), 1.37 (t, J = 7.4 Hz, 3H), 0.86 (t, J = 7.3 Hz, 6H).

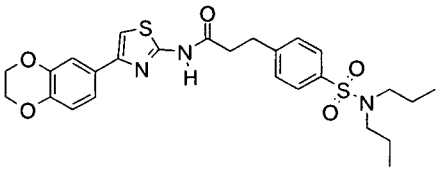
Example 59



N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipropylaminosulfonyl- benzamide (Compound 159)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 10.82 (s, 1H), 8.47 (s, 1H), 8.04 (d, J = 8.3 Hz, 2H), 7.88 (d, J = 8.5 Hz, 2H), 7.62 (s, 1H), 7.59 (d, J = 8.1 Hz, 1H), 7.10 (s, 1H), 6.66 (d, J = 8.1 Hz, 1H), 3.58 (s, 2H), 3.11 (t, J = 7.7 Hz, 4H), 1.56 (m, 4H), 0.87 (t, J = 7.3 Hz, 6H).

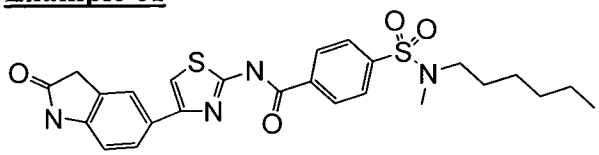
Example 60



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 160)

This compound was prepared as described in Scheme III. ^{1}H NMR (500MHz, $CDCl_3$) 7.67 (d, J = 8.3 Hz, 2H), 7.29 (d, J = 2.1 Hz, 1H), 7.26 (dd, J = 8.3, 2.1 Hz, 1H), 7.08 (d, J = 8.3 Hz, 2H), 7.01 (s, 1H), 6.86 (d, J = 8.3 Hz, 1H), 4.27-4.21 (m, 4H), 3.05 (t, J = 7.5 Hz, 4H), 2.94 (t, J = 7.8 Hz, 2H), 2.40 (t, J = 7.8 Hz, 2H), 1.54 (sext, J = 7.5 Hz, 4H), 0.86 (t, J = 7.5 Hz, 6H).

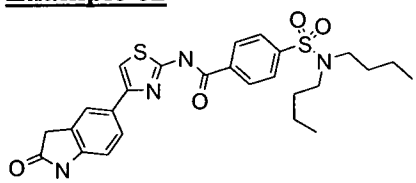
Example 61



N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(N-methyl-N-hexylamino)-sulfonylbenzamide (Compound 161)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 11.58 (s, 1H), 9.33 (s, 1H), 8.06 (d, J = 8.3 Hz, 2H), 7.81 (d, J = 8.3 Hz, 2H), 7.57 (s, 1H), 7.51 (d, J = 7.8 Hz, 1H), 7.09 (s, 1H), 6.50 (d, J = 7.8 Hz, 1H), 3.56 (s, 2H), 3.02 (t, J = 7.3 Hz, 2H), 2.75 (s, 3H), 1.52 (m, 2H), 1.35-1.24 (m, 6H), 0.88 (t, J = 6.9 Hz, 3H).

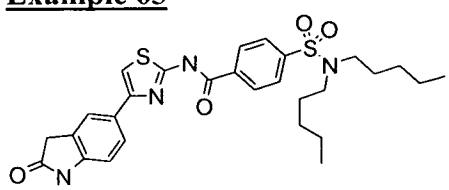
Example 62



N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dibutylamino)sulfonyl-benzamide (Compound 162)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 11.19 (br s, 1H), 8.84 (br s, 1H), 8.04 (d, J = 8.3 Hz, 2H), 7.85 (d, J = 8.3 Hz, 2H), 7.59 (s, 1H), 7.55 (d, J = 7.8 Hz, 1H), 7.09 (s, 1H), 6.59 (m, 1H), 3.56 (s, 2H), 3.14 (t, J = 7.7 Hz, 4H), 1.50 (m, 4H), 1.29 (sext, J = 7.4 Hz, 4H), 0.90 (t, J = 7.4 Hz, 6H).

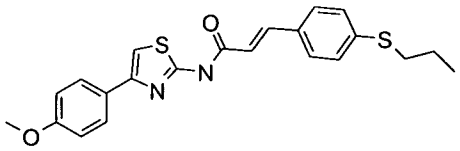
Example 63



N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipentylamino)-sulfonylbenzamide (Compound 163)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 11.67 (s, 1H), 9.35 (s, 1H), 8.03 (d, J = 8.1 Hz, 2H), 7.81 (m, 2H), 7.55 (s, 1H), 7.50 (d, J = 8.2 Hz, 1H), 7.08 (s, 1H), 6.48 (m, 1H), 3.56 (s, 2H), 3.14-3.05 (m, 2H), 3.01-2.84 (m, 2H), 1.65 (m, 1H), 1.55-1.37 (m, 3H), 1.32-1.16 (m, 5H), 1.09 (m, 1H), 0.90-0.84 (m, 2H), 0.89 (t, J = 7.5 Hz, 3H), 0.85 (t, J = 7.5 Hz, 3H).

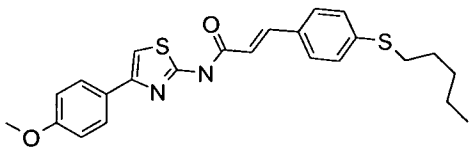
Example 64



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylthiophenyl)acrylamide (Compound 164)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.46 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.68 (d, J = 15.8 Hz, 1H), 7.57 (d, J = 8.4 Hz, 2H), 7.49 (s, 1H), 7.38 (d, J = 8.4 Hz, 2H), 7.00 (d, J = 8.9 Hz, 2H), 6.89 (d, J = 15.8 Hz, 1H), 3.79 (s, 3H), 3.02 (t, J = 7.3 Hz, 2H), 1.63 (sext, J = 7.3 Hz, 2H), 1.00 (t, J = 7.3 Hz, 3H).

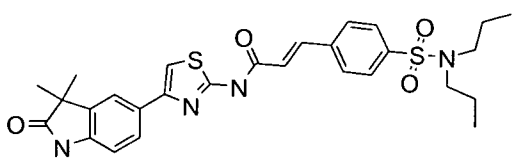
Example 65



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylthiophenyl)acrylamide (Compound 165)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.46 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.69 (d, J = 15.8 Hz, 1H), 7.57 (d, J = 8.4 Hz, 2H), 7.49 (s, 1H), 7.37 (d, J = 8.4 Hz, 2H), 7.00 (d, J = 8.9 Hz, 2H), 6.89 (d, J = 15.8 Hz, 1H), 3.79 (s, 3H), 3.03 (t, J = 7.3 Hz, 2H), 1.61 (m, 2H), 1.39 (m, 2H), 1.31 (m, 2H), 0.87 (t, J = 7.2 Hz, 3H).

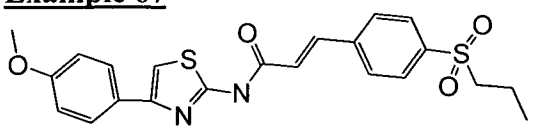
Example 66



N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3(E)-(4-dipropylamino)sulfonylacrylamide (Compound 166)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, Acetone) 11.41 (s, 1H), 9.41 (s, 1H), 7.91 (s, 4H), 7.90 (d, J = 15.7 Hz, 1H), 7.88 (d, J = 2.0 Hz, 1H), 7.80 (dd, J = 8.1, 2.0 Hz, 1H), 7.42 (s, 1H), 7.25 (d, J = 15.7 Hz, 1H), 6.98 (d, J = 8.1 Hz, 1H), 3.14 (t, J = 7.5 Hz, 4H), 1.58 (sext, J = 7.5 Hz, 4H), 1.36 (s, 6H), 0.87 (t, J = 7.5 Hz, 6H).

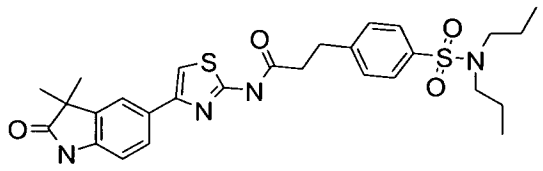
Example 67



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 167)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.55 (s, 1H), 7.84-7.81 (m, 4H), 7.74 (d, J = 15.6 Hz, 1H), 7.30 (d, J = 8.0 Hz, 2H), 7.18 (s, 1H), 6.90 (d, J = 8.8 Hz, 2H), 6.34 (d, J = 15.6 Hz, 1H), 3.73 (s, 3H), 3.08 (t, J = 8.0 Hz, 2H), 1.76 (m, 2H), 1.02 (t, J = 7.6 Hz, 3H).

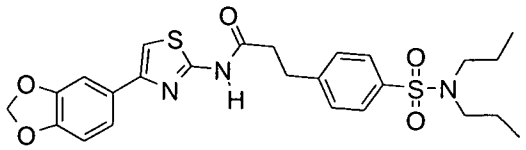
Example 68



N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino)sulfonylpropionamide (Compound 168)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.88 (s, 1H), 9.28 (s, 1H), 7.71 (d, J = 8.4 Hz, 2H), 7.59 (d, J = 1.7 Hz, 1H), 7.50 (dd, J = 8.1, 1.7 Hz, 1H), 7.33 (d, J = 8.4 Hz, 2H), 7.01 (s, 1H), 6.54 (d, J = 8.1 Hz, 1H), 3.11 (t, J = 7.6 Hz, 2H), 3.05 (t, J = 7.5 Hz, 4H), 2.76 (t, J = 7.6 Hz, 2H), 1.54 (sext, J = 7.5 Hz, 4H), 1.40 (s, 6H), 0.85 (t, J = 7.5 Hz, 6H).

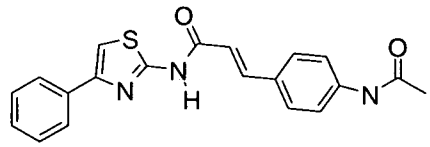
Example 69



N-[4-(1,3-Benzodioxol-5-yl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 169)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.21 (s, 1H), 7.70 (d, J = 8.3 Hz, 2H), 7.47 (d, J = 8.3 Hz, 2H), 7.47 (s, 1H), 7.42 (d, J = 1.8 Hz, 1H), 7.41 (dd, J = 8.5, 1.8 Hz, 1H), 6.95 (d, J = 8.5 Hz, 1H), 6.05 (s, 2H), 3.02 (t, J = 7.6 Hz, 2H), 2.96 (t, J = 7.5 Hz, 4H), 2.80 (t, J = 7.6 Hz, 2H), 1.43 (sext, J = 7.5 Hz, 4H), 0.78 (t, J = 7.5 Hz, 6H).

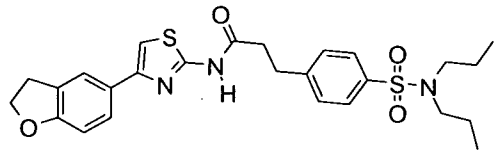
Example 70



N-[4-Phenyl-2-thiazolyl]-3(E)-(4-acetylamino)phenylacrylamide (Compound 170)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 10.31 (s, 1H), 8.46 (d, J = 8.1 Hz, 1H), 8.07 (d, J = 8.1 Hz, 1H), 8.02 (d, J = 15.7 Hz, 1H), 7.93 (t, J = 8.1 Hz, 1H), 7.86 (d, J = 8.4 Hz, 2H), 7.73 (d, J = 8.4 Hz, 2H), 7.69 (t, J = 8.1 Hz, 1H), 7.51 (d, J = 15.7 Hz, 1H), 2.09 (s, 3H).

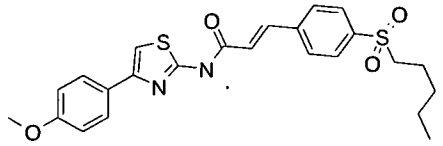
Example 71



N-[4-(2,3-Dihydro-5-benzofuranyl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 171)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.19 (br s, 1H), 7.73 (d, J = 1.8 Hz, 1H), 7.70 (d, J = 8.5 Hz, 2H), 7.62 (dd, J = 8.3, 1.8 Hz, 1H), 7.47 (d, J = 8.5 Hz, 2H), 7.37 (s, 1H), 6.79 (d, J = 8.3 Hz, 1H), 4.56 (t, J = 8.8 Hz, 2H), 3.21 (t, J = 8.8 Hz, 2H), 3.02 (t, J = 7.6 Hz, 2H), 2.96 (t, J = 7.5 Hz, 4H), 2.80 (t, J = 7.6 Hz, 2H), 1.43 (sext, J = 7.5 Hz, 4H), 0.78 (t, J = 7.5 Hz, 6H).

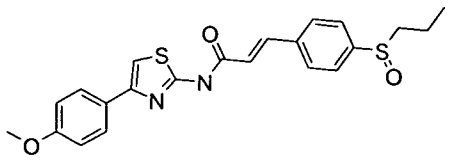
Example 72



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylsulfonylphenyl)acrylamide (Compound 172)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.87 (s, 1H), 7.83 (d, J = 8.7 Hz, 2H), 7.81 (d, J = 8.4 Hz, 2H), 7.71 (d, J = 15.6 Hz, 1H), 7.24 (d, J = 8.4 Hz, 2H), 7.19 (s, 1H), 6.90 (d, J = 8.7 Hz, 2H), 6.28 (d, J = 15.6 Hz, 1H), 3.71 (s, 3H), 3.08 (t, J = 8.0 Hz, 2H), 1.72 (m, 2H), 1.40-1.25 (m, 4H), 0.88 (t, J = 7.1 Hz, 3H).

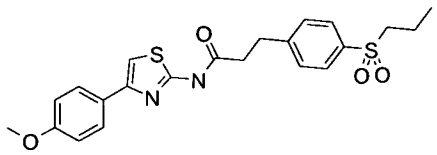
Example 73



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfoxidephenyl)acrylamide (Compound 173)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.56 (s, 1H), 7.85 (d, J = 8.7 Hz, 2H), 7.83 (d, J = 8.2 Hz, 2H), 7.78 (d, J = 15.7 Hz, 1H), 7.74 (d, J = 8.2 Hz, 2H), 7.50 (s, 1H), 7.02 (d, J = 15.7 Hz, 1H), 7.00 (d, J = 8.7 Hz, 2H), 3.80 (s, 3H), 2.97 (m, 1H), 2.79 (m, 1H), 1.68 (m, 1H), 1.48 (m, 1H), 0.97 (t, J = 7.4 Hz, 3H).

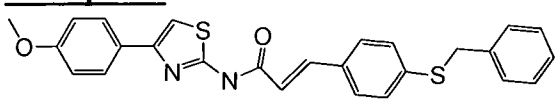
Example 74



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylphenyl)propionamide (Compound 174)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.82 (s, 1H), 7.77 (d, J = 8.2 Hz, 2H), 7.69 (d, J = 8.6 Hz, 2H), 7.20 (d, J = 8.2 Hz, 2H), 7.01 (s, 1H), 6.91 (d, J = 8.6 Hz, 2H), 3.83 (s, 3H), 3.05 (t, J = 8.0 Hz, 2H), 3.00 (t, J = 7.7 Hz, 2H), 2.48 (t, J = 7.7 Hz, 2H), 1.73 (m, 2H), 0.99 (t, J = 7.4 Hz, 3H).

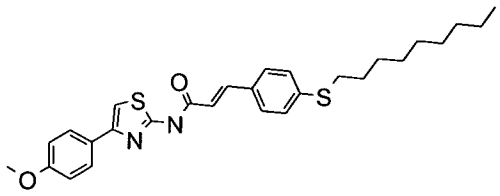
Example 75



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylthiophenyl)acrylamide (Compound 175)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.00 (s, 1H), 7.80 (d, J = 8.7 Hz, 2H), 7.59 (d, J = 15.5 Hz, 1H), 7.38-7.27 (m, 4H), 7.16-7.12 (m, 3H), 6.90 (d, J = 8.3 Hz, 2H), 6.84 (d, J = 8.7 Hz, 2H), 6.05 (d, J = 15.5 Hz, 1H), 4.17 (s, 2H), 3.65 (s, 3H).

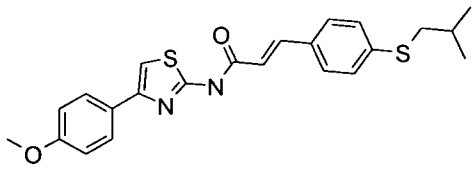
Example 76



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-nonanylthiophenyl)acrylamide (Compound 176)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.54 (s, 1H), 7.83 (d, J = 8.8 Hz, 2H), 7.64 (d, J = 15.5 Hz, 1H), 7.16 (d, J = 8.4 Hz, 2H), 7.14 (s, 1H), 7.00 (d, J = 8.4 Hz, 2H), 6.89 (d, J = 8.8 Hz, 2H), 6.12 (d, J = 15.5 Hz, 1H), 3.71 (s, 3H), 2.95 (t, J = 7.4 Hz, 2H), 1.68 (qn, J = 7.4 Hz, 2H), 1.44 (m, 2H), 1.35-1.24 (m, 10H), 0.88 (t, J = 7.0 Hz, 3H).

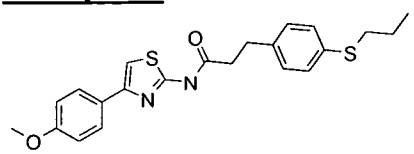
Example 77



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)thiophenyl)-acrylamide (Compound 177)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.03 (s, 1H), 7.84 (d, J = 8.6 Hz, 2H), 7.61 (d, J = 15.5 Hz, 1H), 7.15 (s, 1H), 7.14 (d, J = 8.2 Hz, 2H), 6.91 (d, J = 8.2 Hz, 2H), 6.88 (d, J = 8.6 Hz, 2H), 6.06 (d, J = 15.5 Hz, 1H), 3.68 (s, 3H), 2.84 (d, J = 6.9 Hz, 2H), 1.91 (m, 1H), 1.06 (d, J = 6.7 Hz, 6H).

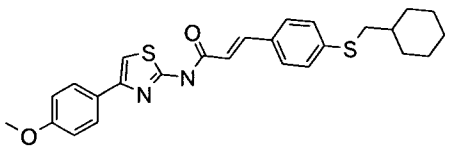
Example 78



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylthiophenyl)propionamide (Compound 178)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.90 (s, 1H), 7.69 (d, J = 8.8 Hz, 2H), 7.19 (d, J = 8.2 Hz, 2H), 6.99 (s, 1H), 6.91 (d, J = 8.8 Hz, 2H), 6.89 (d, J = 8.2 Hz, 2H), 3.83 (s, 3H), 2.86 (t, J = 7.5 Hz, 2H), 2.85 (t, J = 7.5 Hz, 2H), 2.40 (m, 2H), 1.64 (sext, J = 7.3 Hz, 2H), 1.01 (t, J = 7.3 Hz, 3H).

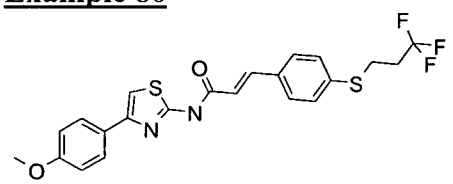
Example 79



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylthiophenyl)-acrylamide (Compound 179)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.46 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.69 (d, J = 15.7 Hz, 1H), 7.56 (d, J = 8.5 Hz, 2H), 7.49 (s, 1H), 7.37 (d, J = 8.5 Hz, 2H), 7.00 (d, J = 8.9 Hz, 2H), 6.89 (d, J = 15.7 Hz, 1H), 3.80 (s, 3H), 2.93 (d, J = 6.9 Hz, 2H), 1.85 (m, 2H), 1.68 (m, 2H), 1.61 (m, 1H), 1.51 (m, 1H), 1.24-1.10 (m, 3H), 1.02 (m, 2H).

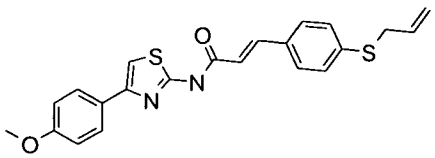
Example 80



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropyl)thiophenyl)-acrylamide (Compound 180)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.52 (s, 1H), 7.84 (d, J = 8.5 Hz, 2H), 7.66 (d, J = 15.5 Hz, 1H), 7.21 (d, J = 8.2 Hz, 2H), 7.16 (s, 1H), 7.06 (d, J = 8.2 Hz, 2H), 6.90 (d, J = 8.5 Hz, 2H), 6.18 (d, J = 15.5 Hz, 1H), 3.71 (s, 3H), 3.12 (t, J = 8.1 Hz, 2H), 2.43 (m, 2H).

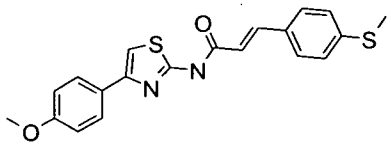
Example 81



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allylthiophenyl)acrylamide (Compound 181)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.94 (s, 1H), 7.81 (d, J = 8.9 Hz, 2H), 7.68 (d, J = 15.5 Hz, 1H), 7.22 (d, J = 8.4 Hz, 2H), 7.12 (d, J = 8.4 Hz, 2H), 7.12 (s, 1H), 6.91 (d, J = 8.9 Hz, 2H), 6.22 (d, J = 15.5 Hz, 1H), 5.90 (ddt, J = 16.9, 10.1, 6.7 Hz, 1H), 5.24 (dq, J = 16.9, 1.2 Hz, 1H), 5.15 (dq, J = 10.1, 1.2 Hz, 1H), 3.75 (s, 3H), 3.61 (dt, J = 6.7, 1.2 Hz, 2H).

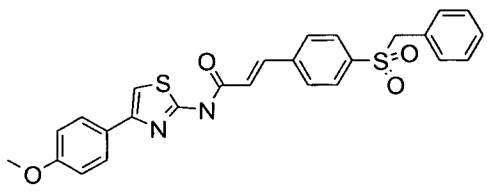
Example 82



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylthiophenyl)acrylamide (Compound 182)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 8.20 (s, 1H), 7.73 (d, J = 8.9 Hz, 2H), 7.73 (d, J = 15.6 Hz, 1H), 7.24 (d, J = 8.4 Hz, 2H), 7.17 (d, J = 8.4 Hz, 2H), 7.05 (s, 1H), 6.93 (d, J = 8.9 Hz, 2H), 6.36 (d, J = 15.6 Hz, 1H), 3.77 (s, 3H), 2.51 (s, 3H).

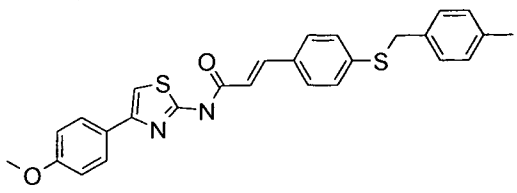
Example 83



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylsulfonylphenyl)acrylamide (Compound 183)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.59 (s, 1H), 7.83 (d, J = 8.7 Hz, 2H), 7.81 (d, J = 8.3 Hz, 2H), 7.77 (d, J = 15.8 Hz, 1H), 7.76 (d, J = 8.3 Hz, 2H), 7.51 (s, 1H), 7.33-7.26 (m, 3H), 7.15 (d, J = 7.1 Hz, 2H), 7.04 (d, J = 15.8 Hz, 1H), 6.99 (d, J = 8.7 Hz, 2H), 4.71 (s, 2H), 3.78 (s, 3H).

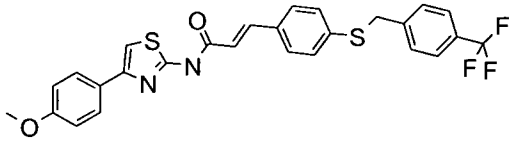
Example 84



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylbenzyl)thiophenyl)-acrylamide (Compound 184)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.69 (s, 1H), 7.80 (d, J = 8.8 Hz, 2H), 7.61 (d, J = 15.5 Hz, 1H), 7.25 (d, J = 8.4 Hz, 2H), 7.15 (d, J = 8.4 Hz, 2H), 7.14 (d, J = 8.4 Hz, 2H), 7.13 (s, 1H), 6.95 (d, J = 8.4 Hz, 2H), 6.85 (d, J = 8.8 Hz, 2H), 6.09 (d, J = 15.5 Hz, 1H), 4.14 (s, 2H), 3.67 (s, 3H), 2.34 (s, 3H).

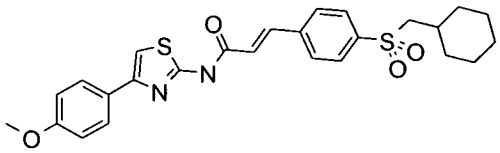
Example 85



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-thiophenyl)acrylamide (Compound 185)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.02 (s, 1H), 7.80 (d, J = 8.7 Hz, 2H), 7.66 (d, J = 15.5 Hz, 1H), 7.58 (d, J = 8.2 Hz, 2H), 7.45 (d, J = 8.2 Hz, 2H), 7.18 (d, J = 8.4 Hz, 2H), 7.11 (s, 1H), 7.08 (d, J = 8.4 Hz, 2H), 6.88 (d, J = 8.7 Hz, 2H), 6.20 (d, J = 15.5 Hz, 1H), 4.20 (s, 2H), 3.72 (s, 3H).

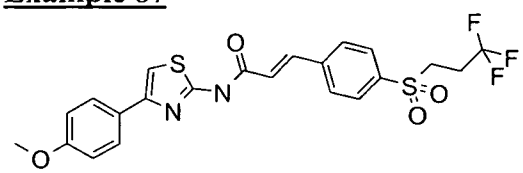
Example 86



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylsulfonyl-phenyl)acrylamide (Compound 186)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.62 (s, 1H), 7.99 (d, J = 8.4 Hz, 2H), 7.89 (d, J = 8.4 Hz, 2H), 7.86 (d, J = 8.6 Hz, 2H), 7.82 (d, J = 15.8 Hz, 1H), 7.53 (s, 1H), 7.08 (d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.6 Hz, 2H), 3.80 (s, 3H), 3.25 (d, J = 5.9 Hz, 2H), 1.84-1.74 (m, 3H), 1.61 (m, 2H), 1.55 (m, 1H), 1.25-1.00 (m, 5H).

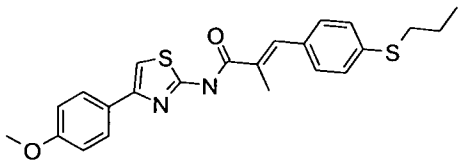
Example 87



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropylsulfonyl-phenyl)acrylamide (Compound 187)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.08 (s, 1H), 7.84 (d, J = 8.8 Hz, 2H), 7.81 (d, J = 8.4 Hz, 2H), 7.71 (d, J = 15.5 Hz, 1H), 7.24 (d, J = 8.4 Hz, 2H), 7.21 (s, 1H), 6.89 (d, J = 8.8 Hz, 2H), 6.29 (d, J = 15.5 Hz, 1H), 3.70 (s, 3H), 3.30 (m, 2H), 2.59 (m, 2H).

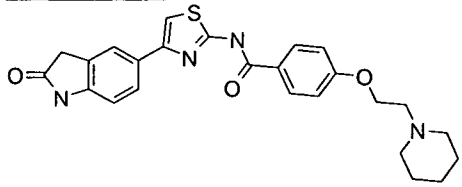
Example 88



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylthio-phenyl)acrylamide (Compound 188)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.50 (s, 1H), 7.74 (d, J = 8.8 Hz, 2H), 7.51 (m, 1H), 7.32 (d, J = 8.4 Hz, 2H), 7.28 (d, J = 8.4 Hz, 2H), 7.03 (s, 1H), 6.94 (d, J = 8.8 Hz, 2H), 3.85 (s, 3H), 2.95 (t, J = 7.3 Hz, 2H), 2.24 (d, J = 1.2 Hz, 3H), 1.73 (sext, J = 7.3 Hz, 2H), 1.06 (t, J = 7.3 Hz, 3H).

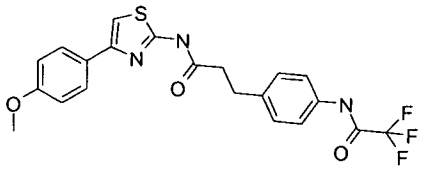
Example 89



N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(2-(1-piperidinyl)ethoxy)-benzamide (Compound 189)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 12.60 (s, 1H), 10.51 (s, 1H), 8.17 (d, J = 8.9 Hz, 2H), 7.81-7.77 (m, 2H), 7.80 (s, 1H), 7.49 (s, 1H), 7.16 (d, J = 8.9 Hz, 2H), 6.88 (d, J = 8.7 Hz, 1H), 4.49 (t, J = 5.1 Hz, 2H), 3.55 (s, 2H), 3.54-3.47 (m, 4H), 3.03 (m, 2H), 1.86-1.66 (m, 6H).

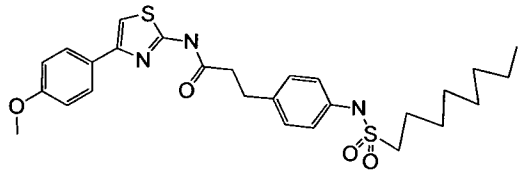
Example 90



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-trifluoroacetylaminophenyl)-propionamide (Compound 190)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.42 (br s, 1H), 7.82 (br s, 1H), 7.71 (d, J = 8.9 Hz, 2H), 7.40 (d, J = 8.5 Hz, 2H), 7.05 (d, J = 8.5 Hz, 2H), 7.01 (s, 1H), 6.92 (d, J = 8.9 Hz, 2H), 3.84 (s, 3H), 2.92 (t, J = 7.6 Hz, 2H), 2.48 (t, J = 7.6 Hz, 2H).

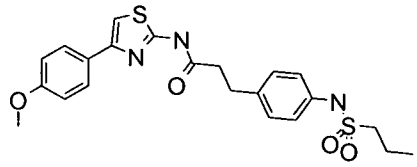
Example 91



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-octylsulfonylaminophenyl)-propionamide (Compound 191)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.93 (s, 1H), 7.68 (d, J = 8.9 Hz, 2H), 7.02 (d, J = 8.5 Hz, 2H), 7.00 (s, 1H), 6.96 (d, J = 8.5 Hz, 2H), 6.91 (d, J = 8.9 Hz, 2H), 3.83 (s, 3H), 3.04 (t, J = 7.9 Hz, 2H), 2.88 (t, J = 7.6 Hz, 2H), 2.45 (t, J = 7.6 Hz, 2H), 1.79 (m, 2H), 1.35 (m, 2H), 1.30-1.19 (m, 8H), 0.86 (t, J = 7.0 Hz, 3H).

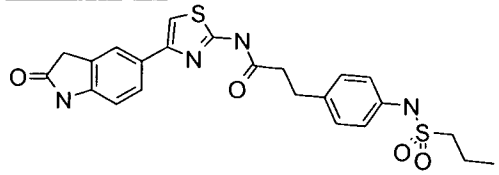
Example 92



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylaminophenyl)-propionamide (Compound 192)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.18 (s, 1H), 7.66 (d, J = 8.9 Hz, 2H), 7.00 (d, J = 8.6 Hz, 2H), 6.99 (s, 1H), 6.90 (d, J = 8.6 Hz, 2H), 6.90 (d, J = 8.9 Hz, 2H), 6.82 (br s, 1H), 3.82 (s, 3H), 3.03 (t, J = 7.9 Hz, 2H), 2.84 (t, J = 7.6 Hz, 2H), 2.38 (t, J = 7.6 Hz, 2H), 1.84 (m, 2H), 1.01 (t, J = 7.4 Hz, 3H).

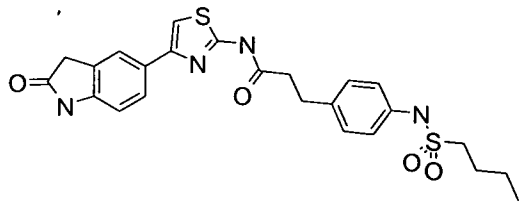
Example 93



N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-propylsulfonylamino-phenyl)propionamide (Compound 193)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.20 (s, 1H), 10.48 (s, 1H), 9.66 (s, 1H), 7.73-7.70 (m, 2H), 7.41 (s, 1H), 7.20 (d, J = 8.5 Hz, 2H), 7.12 (d, J = 8.5 Hz, 2H), 6.85 (d, J = 8.7 Hz, 1H), 3.53 (s, 2H), 3.00 (t, J = 7.6 Hz, 2H), 2.88 (t, J = 7.5 Hz, 2H), 2.74 (t, J = 7.5 Hz, 2H), 1.66 (sext J = 7.6 Hz, 2H), 0.90 (t, J = 7.6 Hz, 3H).

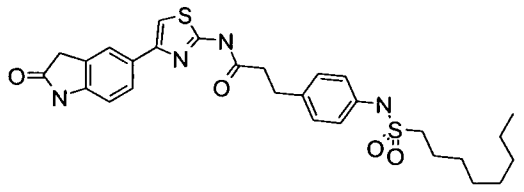
Example 94



N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-butylsulfonylamino-phenyl)propionamide (Compound 194)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.20 (s, 1H), 10.48 (s, 1H), 9.66 (s, 1H), 7.73-7.70 (m, 2H), 7.41 (s, 1H), 7.20 (d, J = 8.5 Hz, 2H), 7.12 (d, J = 8.5 Hz, 2H), 6.85 (d, J = 8.7 Hz, 1H), 3.53 (s, 2H), 3.01 (t, J = 7.4 Hz, 2H), 2.89 (t, J = 7.7 Hz, 2H), 2.74 (t, J = 7.7 Hz, 2H), 1.61 (m, 2H), 1.31 (sext, J = 7.4 Hz, 2H), 0.80 (t, J = 7.4 Hz, 3H).

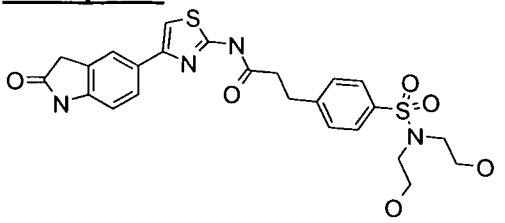
Example 95



N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-octylsulfonylamino-phenyl)propionamide (Compound 195)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.20 (s, 1H), 10.48 (s, 1H), 9.65 (s, 1H), 7.73-7.70 (m, 2H), 7.41 (s, 1H), 7.19 (d, J = 8.6 Hz, 2H), 7.12 (d, J = 8.6 Hz, 2H), 6.85 (d, J = 8.5 Hz, 1H), 3.52 (s, 2H), 3.00 (t, J = 7.6 Hz, 2H), 2.88 (t, J = 7.7 Hz, 2H), 2.73 (t, J = 7.7 Hz, 2H), 1.62 (m, 2H), 1.32-1.16 (m, 10H), 0.83 (t, J = 7.1 Hz, 3H).

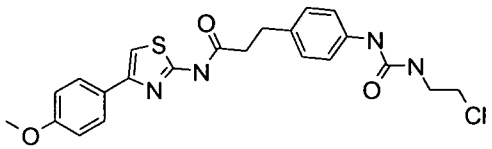
Example 96



N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-bis-(2-hydroxyethyl)-aminosulfonylphenyl)propionamide (Compound 196)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.25 (s, 1H), 10.48 (s, 1H), 7.74-7.70 (m, 2H), 7.73 (d, J = 8.4 Hz, 2H), 7.49 (d, J = 8.4 Hz, 2H), 7.42 (s, 1H), 6.85 (d, J = 8.5 Hz, 1H), 4.81 (t, J = 5.6 Hz, 2H), 3.53 (s, 2H), 3.49 (m, 4H), 3.13 (m, 4H), 3.03 (t, J = 7.3 Hz, 2H), 2.81 (t, J = 7.3 Hz, 2H).

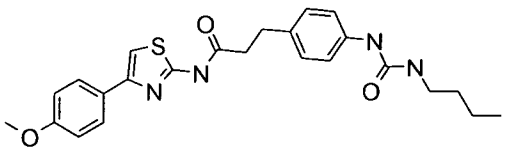
Example 97



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloroethyl)aminocarbonylamino-phenyl)propionamide (Compound 197)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, DMSO) 12.21 (s, 1H), 8.57 (s, 1H), 7.81 (d, J = 8.9 Hz, 2H), 7.43 (s, 1H), 7.30 (d, J = 8.6 Hz, 2H), 7.09 (d, J = 8.6 Hz, 2H), 6.98 (d, J = 8.9 Hz, 2H), 6.38 (t, J = 6.0 Hz, 1H), 3.78 (s, 3H), 3.64 (t, J = 6.0 Hz, 2H), 3.40 (q, J = 6.0 Hz, 2H), 2.85 (t, J = 7.6 Hz, 2H), 2.71 (t, J = 7.6 Hz, 2H).

Example 98

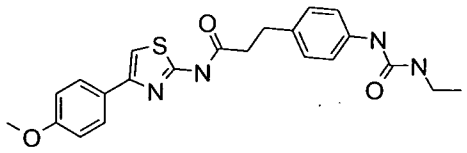


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-butylaminocarbonylamino-phenyl)propionamide (Compound 198)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, DMSO) 12.20 (s, 1H), 8.28 (s, 1H), 7.81 (d, J = 9.0 Hz, 2H), 7.43 (s, 1H), 7.28 (d, J = 8.6 Hz, 2H), 7.08 (d, J = 8.6 Hz, 2H), 6.98 (d, J = 9.0 Hz, 2H), 6.05 (t, J = 5.9 Hz,

1H), 3.78 (s, 3H), 3.05 (dt, *J* = 5.9, 6.9 Hz, 2H), 2.84 (t, *J* = 7.3 Hz, 2H), 2.71 (t, *J* = 7.3 Hz, 2H), 1.45-1.23 (m, 4H), 0.88 (t, *J* = 7.1 Hz, 3H).

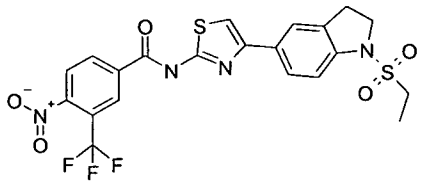
Example 99



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-ethylaminocarbonylamino-phenyl)propionamide (Compound 199)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.21 (s, 1H), 8.31 (s, 1H), 7.81 (d, *J* = 8.9 Hz, 2H), 7.42 (s, 1H), 7.29 (d, *J* = 8.4 Hz, 2H), 7.08 (d, *J* = 8.4 Hz, 2H), 6.98 (d, *J* = 8.9 Hz, 2H), 6.04 (t, *J* = 5.6 Hz, 1H), 3.78 (s, 3H), 3.08 (dq, *J* = 5.6, 7.1 Hz, 2H), 2.84 (t, *J* = 7.6 Hz, 2H), 2.71 (t, *J* = 7.6 Hz, 2H), 1.03 (t, *J* = 7.1 Hz, 3H).

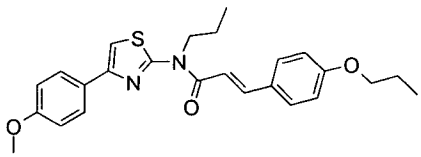
Example 100



N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-trifluoromethyl-4-nitrobenzamide (Compound 200)

This compound was prepared as described in Scheme II. ^{1}H NMR (300MHz, DMSO) 8.72 (d, *J* = 1.8 Hz, 1H), 8.58 (dd, *J* = 8.5, 1.8 Hz, 1H), 8.34 (d, *J* = 8.5 Hz, 1H), 7.84 (m, 1H), 7.80 (dd, *J* = 8.4, 1.8 Hz, 1H), 7.62 (s, 1H), 7.31 (d, *J* = 8.4 Hz, 1H), 4.03 (t, *J* = 8.4 Hz, 2H), 3.25 (q, *J* = 7.4 Hz, 2H), 3.19 (t, *J* = 8.4 Hz, 2H), 1.23 (t, *J* = 7.4 Hz, 3H).

Example 101

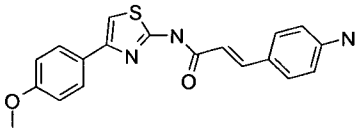


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N-propyl-3(E)-(4-propyloxyphenyl)-acrylamide (Compound 201)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 7.92 (d, *J* = 15.4 Hz, 1H), 7.85 (d, *J* = 8.4 Hz, 2H), 7.54 (d, *J* = 8.4 Hz, 2H),

7.08 (s, 1H), 6.96 (d, J = 8.4 Hz, 2H), 6.93 (d, J = 8.4 Hz, 2H), 6.91 (d, J = 15.4 Hz, 1H), 4.43 (t, J = 7.7 Hz, 2H), 3.97 (t, J = 6.7 Hz, 2H), 3.86 (s, 3H), 1.95 (m, 2H), 1.84 (m, 2H), 1.09 (t, J = 7.5 Hz, 3H), 1.06 (t, J = 7.5 Hz, 3H).

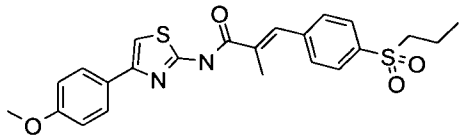
Example 102



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-aminophenyl)acrylamide (Compound 202)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 7.89 (d, J = 15.3 Hz, 1H), 7.71 (d, J = 8.5 Hz, 2H), 7.49 (d, J = 8.0 Hz, 2H), 7.03 (d, J = 8.5 Hz, 2H), 6.93 (s, 1H), 6.68 (d, J = 8.0 Hz, 2H), 6.62 (d, J = 15.3 Hz, 1H), 3.87 (s, 3H).

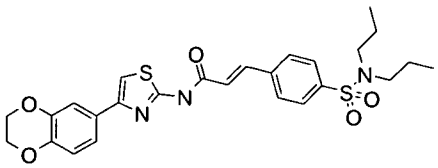
Example 103



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 203)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.80 (s, 1H), 7.94 (d, J = 8.8 Hz, 2H), 7.72 (d, J = 8.4 Hz, 2H), 7.55 (m, 1H), 7.47 (d, J = 8.4 Hz, 2H), 7.05 (s, 1H), 6.94 (d, J = 8.8 Hz, 2H), 3.85 (s, 3H), 3.10 (m, 2H), 2.21 (d, J = 1.5 Hz, 3H), 1.78 (m, 2H), 1.03 (t, J = 7.4 Hz, 3H).

Example 104

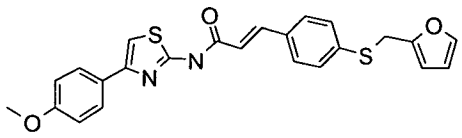


N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-dipropylaminosulfonylphenyl)-acrylamide (Compound 204)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 7.87 (d, J = 8.5 Hz, 2H), 7.84 (d, J = 8.5 Hz, 2H), 7.78 (d, J = 15.9 Hz, 1H), 7.53 (s, 1H), 7.41 (d, J = 2.0 Hz, 1H), 7.39 (dd, J = 8.2, 2.0 Hz, 1H), 7.04 (d, J = 15.9

Hz, 1H), 6.91 (d, J = 8.2 Hz, 1H), 4.27 (s, 4H), 3.05 (t, J = 7.5 Hz, 4H), 1.48 (sext, J = 7.5 Hz, 4H), 0.82 (t, J = 7.5 Hz, 6H).

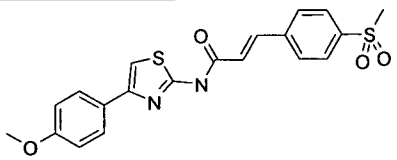
Example 105



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthiophenyl)-acrylamide (Compound 205)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.53 (s, 1H), 7.81 (d, J = 8.9 Hz, 2H), 7.64 (d, J = 15.5 Hz, 1H), 7.38 (dd, J = 2.0, 0.9 Hz, 1H), 7.22 (d, J = 8.3 Hz, 2H), 7.13 (s, 1H), 7.01 (d, J = 8.3 Hz, 2H), 6.88 (d, J = 8.8 Hz, 2H), 6.31 (dd, J = 3.2, 2.0 Hz, 1H), 6.18 (dd, J = 3.2, 0.9 Hz, 1H), 6.14 (d, J = 15.5 Hz, 1H), 4.16 (s, 2H), 3.70 (s, 3H).

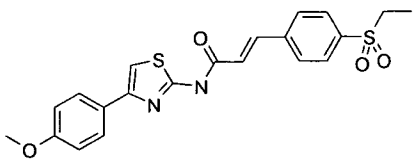
Example 106



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylsulfonylphenyl)acrylamide (Compound 206)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.95 (s, 1H), 7.85 (d, J = 8.4 Hz, 2H), 7.83 (d, J = 8.8 Hz, 2H), 7.71 (d, J = 15.6 Hz, 1H), 7.24 (d, J = 8.4 Hz, 2H), 7.20 (s, 1H), 6.89 (d, J = 8.8 Hz, 2H), 6.28 (d, J = 15.6 Hz, 1H), 3.71 (s, 3H), 3.07 (s, 3H).

Example 107

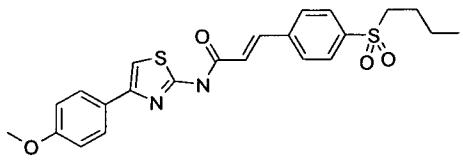


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylsulfonylphenyl)acrylamide (Compound 207)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.01 (s, 1H), 7.83 (d, J = 8.8 Hz, 2H), 7.80 (d, J = 8.2 Hz, 2H), 7.71 (d, J =

15.6 Hz, 1H), 7.22 (d, J = 8.2 Hz, 2H), 7.20 (s, 1H), 6.89 (d, J = 8.8 Hz, 2H), 6.28 (d, J = 15.6 Hz, 1H), 3.70 (s, 3H), 3.13 (q, J = 7.4 Hz, 2H), 1.30 (t, J = 7.4 Hz, 3H).

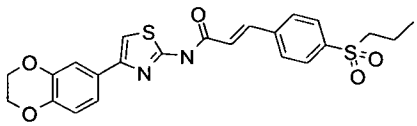
Example 108



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 208)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.04 (s, 1H), 7.84 (d, J = 8.8 Hz, 2H), 7.80 (d, J = 8.2 Hz, 2H), 7.70 (d, J = 15.5 Hz, 1H), 7.21 (d, J = 8.2 Hz, 2H), 7.20 (s, 1H), 6.89 (d, J = 8.8 Hz, 2H), 6.27 (d, J = 15.5 Hz, 1H), 3.70 (s, 3H), 3.09 (m, 2H), 1.70 (m, 2H), 1.41 (sext, J = 7.4 Hz, 2H), 0.91 (t, J = 7.4 Hz, 3H).

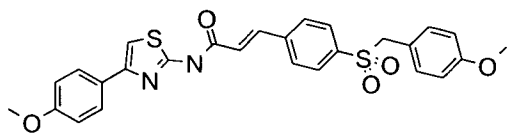
Example 109



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 209)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.70 (s, 1H), 7.86 (d, J = 8.4 Hz, 2H), 7.74 (d, J = 15.5 Hz, 1H), 7.41 (d, J = 2.0 Hz, 1H), 7.39 (dd, J = 8.3, 2.0 Hz, 1H), 7.34 (d, J = 8.4 Hz, 2H), 7.17 (s, 1H), 6.86 (d, J = 8.3 Hz, 1H), 6.34 (d, J = 15.5 Hz, 1H), 4.19 (m, 2H), 4.10 (m, 2H), 3.08 (m, 2H), 1.76 (m, 2H), 1.02 (t, J = 7.4 Hz, 3H).

Example 110

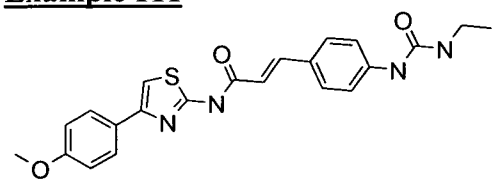


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methoxyphenyl)methyl-sulfonylphenyl)acrylamide (Compound 210)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.85 (d, J = 8.7 Hz, 2H), 7.83 (d, J = 8.3 Hz, 2H), 7.78 (d, J = 15.9 Hz, 1H),

7.77 (d, J = 8.3 Hz, 2H), 7.52 (s, 1H), 7.08 (d, J = 8.6 Hz, 2H), 7.06 (d, J = 15.9 Hz, 1H), 7.00 (d, J = 8.6 Hz, 2H), 6.86 (d, J = 8.7 Hz, 2H), 4.64 (s, 2H), 3.80 (s, 3H), 3.73 (s, 3H).

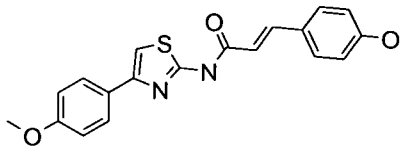
Example 111



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylaminocarbonylamino)-phenylacrylamide (Compound 211)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.38 (s, 1H), 8.75 (s, 1H), 7.85 (d, J = 8.8 Hz, 2H), 7.64 (d, J = 15.7 Hz, 1H), 7.56-7.42 (m, 5H), 7.00 (d, J = 8.8 Hz, 2H), 6.77 (d, J = 15.7 Hz, 1H), 6.22 (t, J = 5.6 Hz, 1H), 3.80 (s, 3H), 3.13 (m, 2H), 1.06 (t, J = 7.1 Hz, 3H).

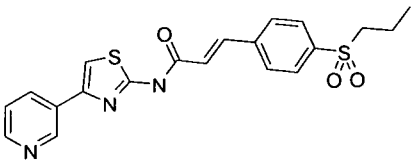
Example 112



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-hydroxyphenyl)acrylamide (Compound 212)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.36 (s, 1H), 7.84 (d, J = 8.7 Hz, 2H), 7.64 (d, J = 15.6 Hz, 1H), 7.48 (d, J = 8.7 Hz, 2H), 7.47 (s, 1H), 7.00 (d, J = 8.7 Hz, 2H), 6.85 (d, J = 8.7 Hz, 2H), 6.73 (d, J = 15.6 Hz, 1H), 3.79 (s, 3H).

Example 113

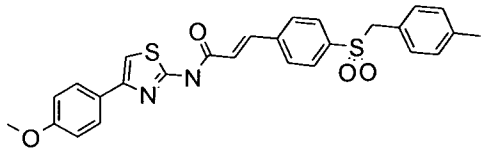


N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 213)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.74 (s, 1H), 9.14 (dd, J = 2.2, 0.8 Hz, 1H), 8.54 (dd, J = 4.8, 1.6 Hz, 1H), 8.26 (ddd, J = 7.9, 2.2, 1.6 Hz, 1H), 7.97 (d, J = 8.4 Hz, 2H), 7.90 (d, J = 8.4 Hz, 2H),

7.87 (s, 1H), 7.83 (d, J = 15.9 Hz, 1H), 7.48 (ddd, J = 7.9, 4.8, 0.8 Hz, 1H), 7.09 (d, J = 15.9 Hz, 1H), 3.32 (m, 2H), 1.57 (sext, J = 7.5 Hz, 2H), 0.93 (t, J = 7.5 Hz, 3H).

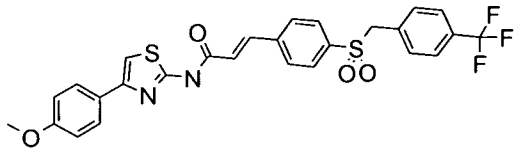
Example 114



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylphenyl)methyl-sulfonylphenyl)-acrylamide (Compound 214)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.61 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.83 (d, J = 8.6 Hz, 2H), 7.79 (d, J = 13.2 Hz, 1H), 7.79 (d, J = 15.9 Hz, 1H), 7.78 (d, J = 8.6 Hz, 2H), 7.52 (s, 1H), 7.11 (d, J = 8.0 Hz, 2H), 7.06 (d, J = 15.9 Hz, 1H), 7.05 (d, J = 8.0 Hz, 2H), 7.00 (d, J = 8.9 Hz, 2H), 4.67 (s, 2H), 3.80 (s, 3H), 2.27 (s, 3H).

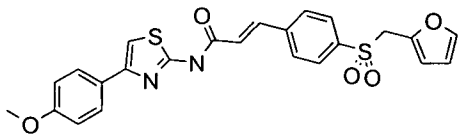
Example 115



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylphenyl)methyl-sulfonylphenyl)acrylamide (Compound 215)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.62 (s, 1H), 7.86 (d, J = 8.4 Hz, 2H), 7.86 (d, J = 8.8 Hz, 2H), 7.82 (d, J = 8.4 Hz, 2H), 7.80 (d, J = 15.8 Hz, 1H), 7.72 (d, J = 8.1 Hz, 2H), 7.53 (s, 1H), 7.43 (d, J = 8.1 Hz, 2H), 7.08 (d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.8 Hz, 2H), 4.90 (s, 2H), 3.80 (s, 3H).

Example 116

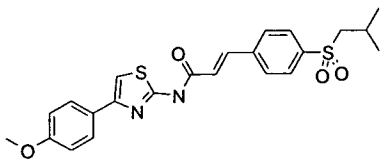


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylsulfonylphenyl)-acrylamide (Compound 216)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.63 (s, 1H), 7.86 (d, J = 8.9 Hz, 2H), 7.86 (d, J = 8.2 Hz, 2H), 7.82 (d, J = 8.2 Hz, 2H), 7.81 (d, J = 15.8 Hz, 1H), 7.63 (dd, J = 2.0, 0.8 Hz, 1H), 7.53 (s, 1H), 7.08

(d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.9 Hz, 2H), 6.43 (dd, J = 3.3, 2.0 Hz, 1H), 6.28 (dd, J = 3.3, 0.8 Hz, 1H), 4.90 (s, 2H), 3.80 (s, 3H).

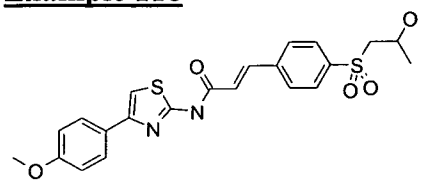
Example 117



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonylphenyl)-acrylamide (Compound 217)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.62 (s, 1H), 7.99 (d, J = 8.4 Hz, 2H), 7.90 (d, J = 8.4 Hz, 2H), 7.86 (d, J = 8.9 Hz, 2H), 7.82 (d, J = 15.8 Hz, 1H), 7.53 (s, 1H), 7.08 (d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.9 Hz, 2H), 3.80 (s, 3H), 3.26 (d, J = 6.6 Hz, 2H), 2.02 (m, 1H), 0.98 (d, J = 6.7 Hz, 6H).

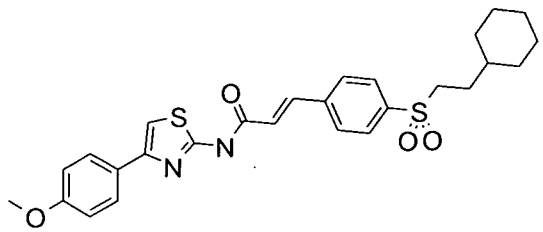
Example 118



(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxypropyl)-sulfonylphenyl)acrylamide (Compound 218)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.61 (s, 1H), 7.97 (d, J = 8.5 Hz, 2H), 7.87 (d, J = 8.5 Hz, 2H), 7.85 (d, J = 8.8 Hz, 2H), 7.81 (d, J = 15.8 Hz, 1H), 7.52 (s, 1H), 7.07 (d, J = 15.8 Hz, 1H), 7.00 (d, J = 8.8 Hz, 2H), 4.90 (d, J = 5.4 Hz, 1H), 4.03 (m, 1H), 3.80 (s, 3H), 3.44-3.38 (m, 2H), 1.14 (d, J = 6.3 Hz, 3H).

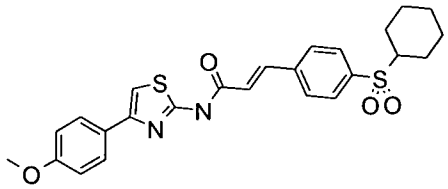
Example 119



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)-sulfonylphenyl)-acrylamide (Compound 219)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.63 (s, 1H), 7.98 (d, J = 8.4 Hz, 2H), 7.90 (d, J = 8.4 Hz, 2H), 7.86 (d, J = 8.8 Hz, 2H), 7.82 (d, J = 15.8 Hz, 1H), 7.53 (s, 1H), 7.09 (d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.8 Hz, 2H), 3.80 (s, 3H), 3.35 (m, 2H), 1.65-1.54 (m, 5H), 1.43 (m, 2H), 1.26 (m, 1H), 1.19-1.04 (m, 3H), 0.81 (m, 2H).

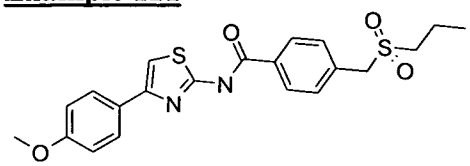
Example 120



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylsulfonylphenyl)-acrylamide (Compound 220)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) δ 12.63 (s, 1H), 7.92 (d, J = 8.8 Hz, 2H), 7.90 (d, J = 8.8 Hz, 2H), 7.85 (d, J = 8.8 Hz, 2H), 7.82 (d, J = 15.8 Hz, 1H), 7.53 (s, 1H), 7.09 (d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.8 Hz, 2H), 3.80 (s, 3H), 3.24 (m, 1H), 1.92-1.87 (m, 2H), 1.79-1.73 (m, 2H), 1.59 (m, 1H), 1.33-1.18 (m, 4H), 1.09 (m, 1H).

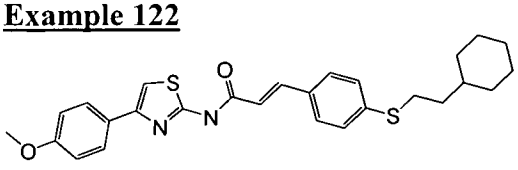
Example 121



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylmethylphenyl)-acrylamide (Compound 221)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 12.79 (s, 1H), 8.14 (d, J = 8.4 Hz, 2H), 7.89 (d, J = 8.9 Hz, 2H), 7.57 (d, J = 8.4 Hz, 2H), 7.54 (s, 1H), 7.01 (d, J = 8.9 Hz, 2H), 4.60 (s, 2H), 3.80 (s, 3H), 3.06 (m, 2H), 1.73 (m, 2H), 0.99 (t, J = 7.4 Hz, 3H).

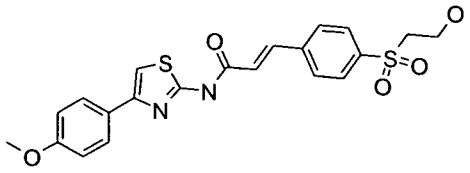
Example 122



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)thiophenyl)-acrylamide (Compound 222)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.13 (s, 1H), 7.84 (d, J = 8.6 Hz, 2H), 7.61 (d, J = 15.5 Hz, 1H), 7.15 (s, 1H), 7.12 (d, J = 8.2 Hz, 2H), 6.91 (d, J = 8.2 Hz, 2H), 6.88 (d, J = 8.6 Hz, 2H), 6.05 (d, J = 15.5 Hz, 1H), 3.68 (s, 3H), 2.96 (t, J = 7.7 Hz, 2H), 1.78-1.64 (m, 4H), 1.60-1.55 (m, 2H), 1.42 (m, 1H), 1.31-1.12 (m, 4H), 0.99-0.89 (m, 2H).

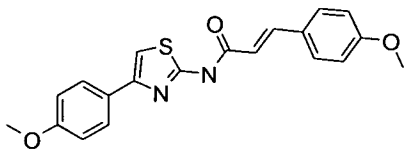
Example 123



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxyethyl)sulfonylphenyl)-acrylamide (Compound 223)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.62 (s, 1H), 7.97 (d, J = 8.5 Hz, 2H), 7.88 (d, J = 8.5 Hz, 2H), 7.85 (d, J = 8.8 Hz, 2H), 7.82 (d, J = 15.8 Hz, 1H), 7.54 (s, 1H), 7.08 (d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.8 Hz, 2H), 4.89 (t, J = 5.4 Hz, 1H), 3.80 (s, 3H), 3.70 (m, 2H), 3.49 (t, J = 6.3 Hz, 2H).

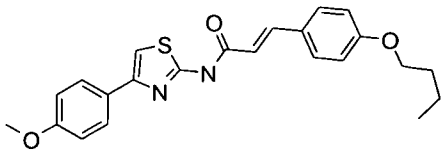
Example 124



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methoxyphenyl)acrylamide (Compound 224)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.53 (s, 1H), 7.84 (d, J = 8.9 Hz, 2H), 7.65 (d, J = 15.5 Hz, 1H), 7.13 (s, 1H), 7.05 (d, J = 8.9 Hz, 2H), 6.90 (d, J = 8.9 Hz, 2H), 6.79 (d, J = 8.9 Hz, 2H), 6.04 (d, J = 15.5 Hz, 1H), 3.83 (s, 3H), 3.71 (s, 3H).

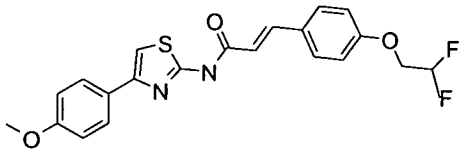
Example 125



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butoxyphenyl)acrylamide (Compound 225)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.28 (s, 1H), 7.83 (d, J = 8.8 Hz, 2H), 7.66 (d, J = 15.5 Hz, 1H), 7.12 (s, 1H), 7.08 (d, J = 8.8 Hz, 2H), 6.91 (d, J = 8.8 Hz, 2H), 6.79 (d, J = 8.8 Hz, 2H), 6.06 (d, J = 15.5 Hz, 1H), 3.98 (t, J = 6.5 Hz, 2H), 3.72 (s, 3H), 1.78 (m, 2H), 1.50 (sext, J = 7.4 Hz, 2H), 0.99 (t, J = 7.4 Hz, 3H).

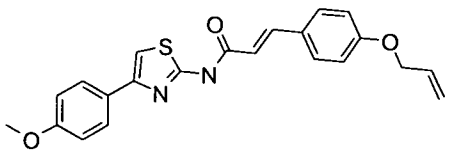
Example 126



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethyloxy)phenyl)-acrylamide (Compound 226)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.59 (s, 1H), 7.84 (d, J = 8.8 Hz, 2H), 7.65 (d, J = 15.5 Hz, 1H), 7.14 (s, 1H), 7.06 (d, J = 8.8 Hz, 2H), 6.90 (d, J = 8.8 Hz, 2H), 6.81 (d, J = 8.8 Hz, 2H), 6.11 (tt, J = 54.8, 4.2 Hz, 1H), 6.07 (d, J = 15.5 Hz, 1H), 4.20 (td, J = 13.0, 4.2 Hz, 2H), 3.71 (s, 3H).

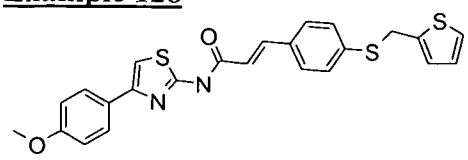
Example 127



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 227)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.12 (s, 1H), 7.83 (d, J = 8.8 Hz, 2H), 7.67 (d, J = 15.5 Hz, 1H), 7.12 (s, 1H), 7.11 (d, J = 8.8 Hz, 2H), 6.91 (d, J = 8.8 Hz, 2H), 6.83 (d, J = 8.8 Hz, 2H), 6.09 (d, J = 15.5 Hz, 1H), 6.06 (ddt, J = 17.2, 10.6, 5.3 Hz, 1H), 5.43 (dq, J = 17.2, 1.4 Hz, 1H), 5.33 (dq, J = 10.6, 1.4 Hz, 1H), 4.57 (dt, J = 5.3, 1.4 Hz, 2H), 3.73 (s, 3H).

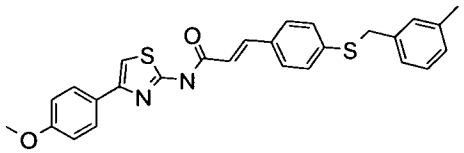
Example 128



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-thienyl)methylthiophenyl)-acrylamide (Compound 228)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.46 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.68 (d, J = 15.8 Hz, 1H), 7.56 (d, J = 8.4 Hz, 2H), 7.49 (s, 1H), 7.44 (d, J = 8.4 Hz, 2H), 7.40 (dd, J = 5.2, 1.2 Hz, 1H), 7.06 (dd, J = 3.4, 1.2 Hz, 1H), 7.00 (d, J = 8.9 Hz, 2H), 6.93 (dd, J = 5.2, 3.4 Hz, 1H), 6.89 (d, J = 15.8 Hz, 1H), 4.58 (s, 2H), 3.79 (s, 3H).

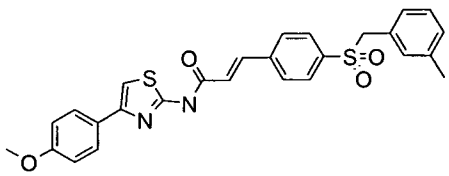
Example 129



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methylthio-phenyl)acrylamide (Compound 229)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.46 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.68 (d, J = 15.8 Hz, 1H), 7.55 (d, J = 8.4 Hz, 2H), 7.49 (s, 1H), 7.41 (d, J = 8.4 Hz, 2H), 7.24-7.19 (m, 3H), 7.07 (m, 1H), 7.00 (d, J = 8.9 Hz, 2H), 6.88 (d, J = 15.8 Hz, 1H), 4.29 (s, 2H), 3.79 (s, 3H), 2.28 (s, 3H).

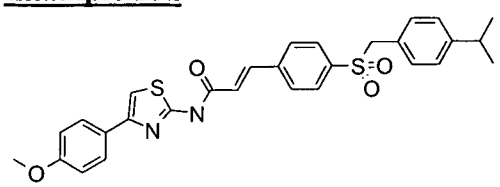
Example 130



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methylsulfonyl-phenyl)acrylamide (Compound 230)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.62 (s, 1H), 7.86 (d, J = 8.8 Hz, 2H), 7.83 (d, J = 8.4 Hz, 2H), 7.80 (d, J = 15.8 Hz, 1H), 7.79 (d, J = 8.4 Hz, 2H), 7.54 (s, 1H), 7.18 (t, J = 7.5 Hz, 1H), 7.14 (d, J = 7.5 Hz, 1H), 7.07 (d, J = 15.8 Hz, 1H), 7.01 (d, J = 8.8 Hz, 2H), 6.98 (s, 1H), 6.94 (d, J = 7.5 Hz, 1H), 4.66 (s, 2H), 3.80 (s, 3H), 2.23 (s, 3H).

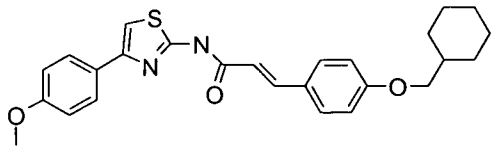
Example 131



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-isopropylphenyl)methylsulfonyl-phenyl)acrylamide (Compound 231)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.61 (s, 1H), 7.86 (d, J = 8.8 Hz, 2H), 7.84 (d, J = 8.3 Hz, 2H), 7.81 (d, J = 8.3 Hz, 2H), 7.80 (d, J = 15.9 Hz, 1H), 7.53 (s, 1H), 7.19 (d, J = 8.1 Hz, 2H), 7.11 (d, J = 8.1 Hz, 2H), 7.07 (d, J = 15.9 Hz, 1H), 7.01 (d, J = 8.8 Hz, 2H), 4.66 (s, 2H), 3.80 (s, 3H), 2.86 (sept, J = 7.0 Hz, 1H), 1.18 (d, J = 7.0 Hz, 6H).

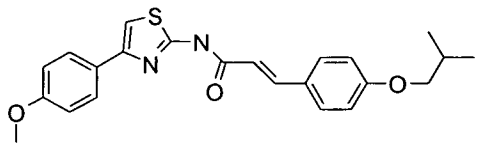
Example 132



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 232)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.33 (s, 1H), 7.83 (d, J = 8.9 Hz, 2H), 7.66 (d, J = 15.5 Hz, 1H), 7.12 (s, 1H), 7.07 (d, J = 8.8 Hz, 2H), 6.91 (d, J = 8.9 Hz, 2H), 6.78 (d, J = 8.8 Hz, 2H), 6.06 (d, J = 15.5 Hz, 1H), 3.77 (d, J = 6.3 Hz, 2H), 3.72 (s, 3H), 1.87 (m, 2H), 1.81-1.75 (m, 3H), 1.72 (m, 1H), 1.36-1.16 (m, 3H), 1.06 (m, 2H).

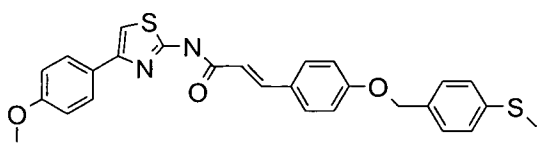
Example 133



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyloxy)phenyl)-acrylamide (Compound 233)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.71 (s, 1H), 7.81 (d, J = 8.8 Hz, 2H), 7.71 (d, J = 15.5 Hz, 1H), 7.21 (d, J = 8.8 Hz, 2H), 7.09 (s, 1H), 6.92 (d, J = 8.8 Hz, 2H), 6.83 (d, J = 8.8 Hz, 2H), 6.17 (d, J = 15.5 Hz, 1H), 3.76 (s, 3H), 3.75 (d, J = 6.7 Hz, 2H), 2.10 (m, 1H), 1.04 (d, J = 6.7 Hz, 6H).

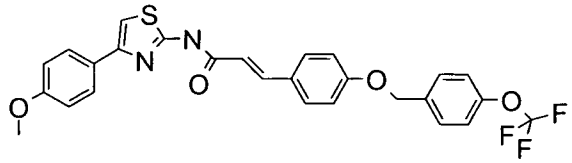
Example 134



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylthiophenyl)-methoxyphenyl)-acrylamide (Compound 234)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.27 (s, 1H), 7.80 (d, J = 8.7 Hz, 2H), 7.72 (d, J = 15.5 Hz, 1H), 7.35 (d, J = 8.9 Hz, 2H), 7.30-7.25 (m, 4H), 7.09 (s, 1H), 6.92 (d, J = 8.9 Hz, 4H), 6.21 (d, J = 15.5 Hz, 1H), 5.06 (s, 2H), 3.77 (s, 3H), 2.50 (s, 3H).

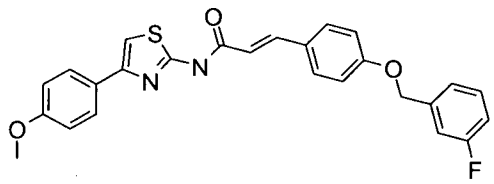
Example 135



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethoxyphenyl)-methoxyphenyl)acrylamide (Compound 235)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.75 (s, 1H), 7.82 (d, J = 8.8 Hz, 2H), 7.70 (d, J = 15.5 Hz, 1H), 7.47 (d, J = 8.8 Hz, 2H), 7.26 (d, J = 8.8 Hz, 2H), 7.19 (d, J = 8.8 Hz, 2H), 7.11 (s, 1H), 6.91 (d, J = 8.8 Hz, 2H), 6.90 (d, J = 8.8 Hz, 2H), 6.15 (d, J = 15.5 Hz, 1H), 5.09 (s, 2H), 3.74 (s, 3H).

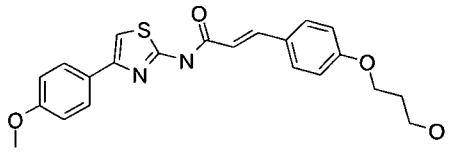
Example 136



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorophenyl)-methoxyphenyl)-acrylamide (Compound 236)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.12 (s, 1H), 7.82 (d, J = 9.0 Hz, 2H), 7.67 (d, J = 15.5 Hz, 1H), 7.37 (td, J = 7.9, 5.9 Hz, 1H), 7.20 (m, 1H), 7.16 (m, 1H), 7.12 (m, 3H), 7.05 (m, 1H), 6.89 (d, J = 8.7 Hz, 2H), 6.87 (d, J = 8.7 Hz, 2H), 6.10 (d, J = 15.5 Hz, 1H), 5.09 (s, 2H), 3.72 (s, 3H).

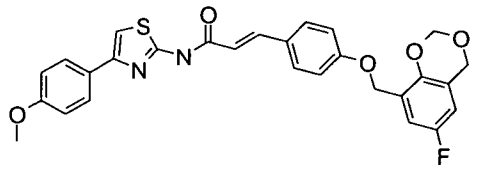
Example 137



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 237)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.52 (s, 1H), 7.78 (d, J = 8.8 Hz, 2H), 7.75 (d, J = 15.6 Hz, 1H), 7.30 (d, J = 8.8 Hz, 2H), 7.05 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.86 (d, J = 8.8 Hz, 2H), 6.32 (d, J = 15.6 Hz, 1H), 4.16 (t, J = 6.0 Hz, 2H), 3.88 (t, J = 6.0 Hz, 2H), 3.78 (s, 3H), 2.07 (qn, J = 6.0 Hz, 2H).

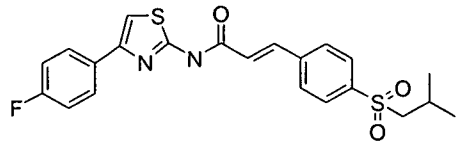
Example 138



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(6-fluoro-1,3-benzodioxan-8-yl)-methoxyphenyl)acrylamide (Compound 238)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.80 (s, 1H), 7.82 (d, J = 8.6 Hz, 2H), 7.70 (d, J = 15.4 Hz, 1H), 7.19 (d, J = 8.6 Hz, 2H), 7.11 (s, 1H), 7.09 (dd, J = 9.1, 2.5 Hz, 1H), 6.91 (d, J = 8.6 Hz, 2H), 6.91 (d, J = 8.6 Hz, 2H), 6.67 (dd, J = 8.3, 2.5 Hz, 1H), 6.15 (d, J = 15.4 Hz, 1H), 5.30 (s, 2H), 5.10 (s, 2H), 4.92 (s, 2H), 3.74 (s, 3H).

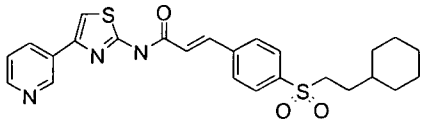
Example 139



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonylphenyl)-acrylamide (Compound 239)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.66 (s, 1H), 7.99 (d, J = 8.4 Hz, 2H), 7.96 (dd, J = 8.9, 5.5 Hz, 2H), 7.90 (d, J = 8.4 Hz, 2H), 7.83 (d, J = 15.9 Hz, 1H), 7.69 (s, 1H), 7.28 (t, J = 8.9 Hz, 2H), 7.09 (d, J = 15.9 Hz, 1H), 3.26 (d, J = 6.3 Hz, 2H), 2.02 (m, 1H), 0.98 (d, J = 6.8 Hz, 6H).

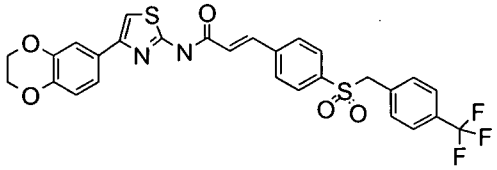
Example 140



N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexyethyl)sulfonylphenyl)-acrylamide (Compound 240)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.74 (s, 1H), 9.14 (dd, J = 2.3, 0.8 Hz, 1H), 8.54 (dd, J = 4.8, 1.6 Hz, 1H), 8.26 (ddd, J = 8.0, 2.3, 1.6 Hz, 1H), 7.98 (d, J = 8.3 Hz, 2H), 7.90 (d, J = 8.3 Hz, 2H), 7.89 (s, 1H), 7.85 (d, J = 15.9 Hz, 1H), 7.48 (ddd, J = 8.0, 4.8, 0.8 Hz, 1H), 7.10 (d, J = 15.9 Hz, 1H), 3.35 (m, 2H), 1.65-1.54 (m, 5H), 1.43 (m, 2H), 1.26 (m, 1H), 1.17-1.04 (m, 3H), 0.81 (m, 2H).

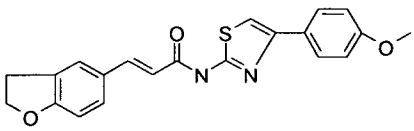
Example 141



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-sulfonylphenyl)acrylamide (Compound 241)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.59 (s, 1H), 7.85 (d, J = 8.5 Hz, 2H), 7.82 (d, J = 8.5 Hz, 2H), 7.80 (d, J = 15.8 Hz, 1H), 7.71 (d, J = 8.1 Hz, 2H), 7.55 (s, 1H), 7.42 (d, J = 8.1 Hz, 2H), 7.41 (d, J = 2.0 Hz, 1H), 7.40 (dd, J = 8.1, 2.0 Hz, 1H), 7.07 (d, J = 15.8 Hz, 1H), 6.91 (d, J = 8.1 Hz, 1H), 4.90 (s, 2H), 4.28 (s, 4H).

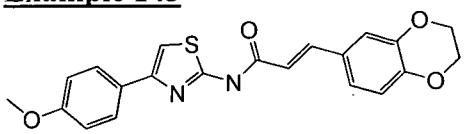
Example 142



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,2-dihydro-5-benzofuranyl)-acrylamide (Compound 242)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.38 (s, 1H), 7.85 (d, J = 8.8 Hz, 2H), 7.67 (d, J = 15.7 Hz, 1H), 7.53 (s, 1H), 7.48 (s, 1H), 7.41 (d, J = 8.3 Hz, 1H), 7.00 (d, J = 8.8 Hz, 2H), 6.86 (d, J = 8.3 Hz, 1H), 6.75 (d, J = 15.7 Hz, 1H), 4.61 (t, J = 8.6 Hz, 2H), 3.79 (s, 3H), 3.24 (t, J = 8.6 Hz, 2H).

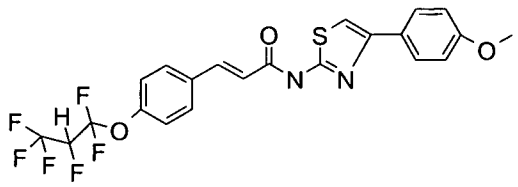
Example 143



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,4-benzodioxan-6-yl)acrylamide (Compound 243)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.38 (s, 1H), 7.85 (d, J = 8.8 Hz, 2H), 7.62 (d, J = 15.9 Hz, 1H), 7.49 (s, 1H), 7.17-7.12 (m, 2H), 7.00 (d, J = 8.8 Hz, 2H), 6.95 (d, J = 8.7 Hz, 1H), 6.77 (d, J = 15.9 Hz, 1H), 4.29 (s, 4H), 3.79 (s, 3H).

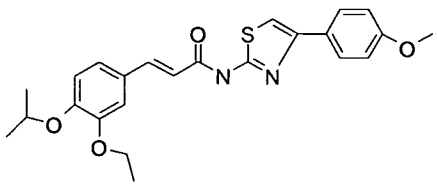
Example 144



(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-1,1,2,3,3,3-pentafluoropropyloxy-phenyl)acrylamide (Compound 244)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.33 (s, 1H), 7.83 (d, J = 8.5 Hz, 2H), 7.63 (d, J = 15.5 Hz, 1H), 7.18 (s, 1H), 7.09 (d, J = 8.3 Hz, 2H), 7.01 (d, J = 8.3 Hz, 2H), 6.87 (d, J = 8.5 Hz, 2H), 6.07 (d, J = 15.5 Hz, 1H), 5.02 (dsext, J = 43.8, 5.2 Hz, 1H), 3.66 (s, 3H).

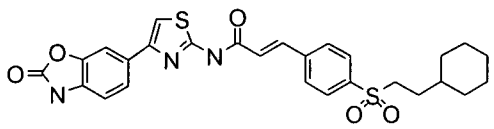
Example 145



(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-isopropyloxy-4-ethoxyphenyl)-acrylamide (Compound 245)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.33 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.65 (d, J = 15.5 Hz, 1H), 7.49 (s, 1H), 7.25-7.18 (m, 2H), 7.04 (d, J = 8.7 Hz, 1H), 7.00 (d, J = 8.9 Hz, 2H), 6.81 (d, J = 15.5 Hz, 1H), 4.09 (q, J = 7.0 Hz, 2H), 3.80 (s, 3H), 3.80 (m, 1H), 1.36 (t, J = 7.0 Hz, 3H), 0.99 (d, J = 6.6 Hz, 6H).

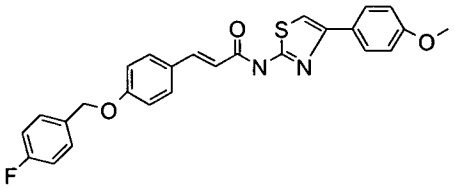
Example 146



N-[4-(2-Oxo-2,3-dihydrobenzoxazol-6-yl)thiazol-2-yl]-3(E)-(4-(2-cyclohexyethyl)-sulfonylphenyl)acrylamide (Compound 246)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 2.66 (s, 1H), 11.75 (s, 1H), 7.98 (d, J = 8.3 Hz, 2H), 7.90 (d, J = 8.3 Hz, 2H), 7.83 (d, J = 15.9 Hz, 1H), 7.81 (d, J = 1.6 Hz, 1H), 7.76 (dd, J = 8.1, 1.6 Hz, 1H), 7.67 (s, 1H), 7.16 (d, J = 8.1 Hz, 1H), 7.09 (d, J = 15.9 Hz, 1H), 3.34 (m, 2H), 1.65-1.54 (m, 5H), 1.46-1.39 (m, 2H), 1.28 (m, 1H), 1.18-1.04 (m, 3H), 0.88-0.76 (m, 2H).

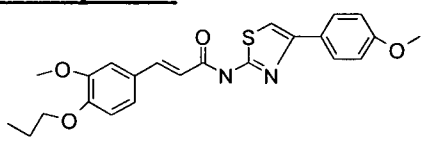
Example 147



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-fluorophenyl)methoxyphenyl)-acrylamide (Compound 247)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.86 (s, 1H), 7.81 (d, J = 8.6 Hz, 2H), 7.70 (d, J = 15.5 Hz, 1H), 7.41 (dd, J = 8.4, 5.5 Hz, 2H), 7.18 (d, J = 8.6 Hz, 2H), 7.11 (s, 1H), 7.10 (t, J = 8.4 Hz, 2H), 6.91 (d, J = 8.6 Hz, 2H), 6.89 (d, J = 8.6 Hz, 2H), 6.15 (d, J = 15.5 Hz, 1H), 5.05 (s, 2H), 3.74 (s, 3H).

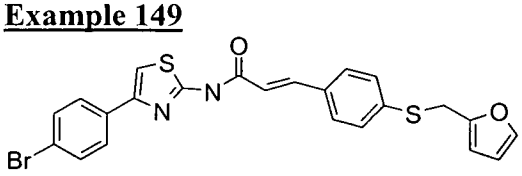
Example 148



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-propyloxyphenyl)-acrylamide (Compound 248)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.81 (br s, 1H), 7.78 (d, J = 9.0 Hz, 2H), 7.68 (d, J = 15.6 Hz, 1H), 7.09 (s, 1H), 6.88 (d, J = 9.0 Hz, 2H), 6.85 (dd, J = 8.2, 1.9 Hz, 1H), 6.83 (d, J = 1.9 Hz, 1H), 6.80 (d, J = 8.2 Hz, 1H), 6.17 (d, J = 15.6 Hz, 1H), 4.01 (t, J = 6.8 Hz, 2H), 3.86 (s, 3H), 3.74 (s, 3H), 1.89 (m, 2H), 1.06 (t, J = 7.3 Hz, 3H).

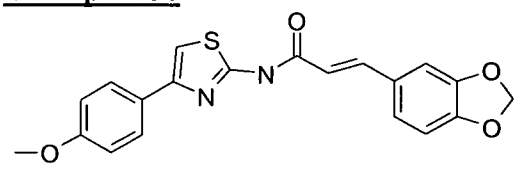
Example 149



N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthio-phenyl)acrylamide (Compound 249)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.53 (br s, 1H), 7.87 (d, J = 8.5 Hz, 2H), 7.75 (s, 1H), 7.70 (d, J = 15.6 Hz, 1H), 7.64 (d, J = 8.5 Hz, 2H), 7.59 (dd, J = 2.0, 0.8 Hz, 1H), 7.57 (d, J = 8.5 Hz, 2H), 7.44 (d, J = 8.5 Hz, 2H), 6.89 (d, J = 15.6 Hz, 1H), 6.37 (dd, J = 3.2, 2.0 Hz, 1H), 6.32 (dd, J = 3.2, 0.8 Hz, 1H), 4.37 (s, 2H).

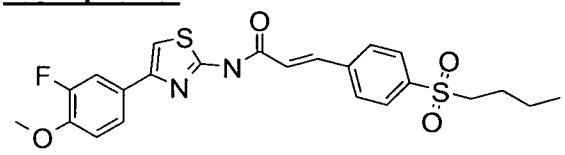
Example 150



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(5-benzo-1,3-dioxolyl)acrylamide (Compound 250)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 11.19 (s, 1H), 7.87 (d, J = 8.8 Hz, 2H), 7.75 (d, J = 15.6 Hz, 1H), 7.34 (s, 1H), 7.22-7.19 (m, 2H), 6.97 (d, J = 8.8 Hz, 2H), 6.94 (d, J = 8.3 Hz, 1H), 6.93 (d, J = 15.6 Hz, 1H), 6.10 (s, 2H), 3.83 (s, 3H).

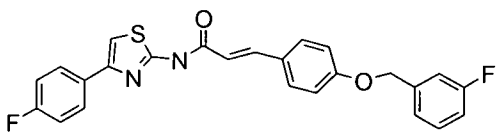
Example 151



N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonyl)phenyl-acrylamide (Compound 251)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, Acetone) 8.00 (d, J = 8.5 Hz, 2H), 7.96 (d, J = 8.5 Hz, 2H), 7.92 (d, J = 15.8 Hz, 1H), 7.72 (m, 1H), 7.69 (dd, J = 12.6, 2.0 Hz, 1H), 7.49 (s, 1H), 7.27 (d, J = 15.8 Hz, 1H), 7.18 (t, J = 8.7 Hz, 1H), 3.92 (s, 3H), 3.25 (m, 2H), 1.65 (m, 2H), 1.43 (m, 2H), 0.89 (t, J = 7.3 Hz, 3H).

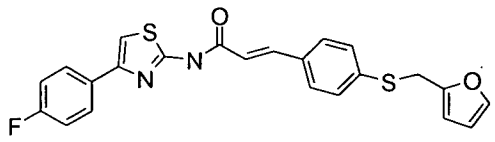
Example 152



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 252)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, Acetone) 11.25 (s, 1H), 7.97 (dd, J = 8.9, 5.5 Hz, 2H), 7.80 (d, J = 15.8 Hz, 1H), 7.66 (d, J = 8.7 Hz, 2H), 7.48 (s, 1H), 7.46 (dt, J = 5.9, 8.0 Hz, 1H), 7.34 (m, 1H), 7.29 (m, 1H), 7.18 (t, J = 8.9 Hz, 2H), 7.13 (d, J = 8.7 Hz, 2H), 7.12 (m, 1H), 6.96 (d, J = 15.8 Hz, 1H), 5.24 (s, 2H).

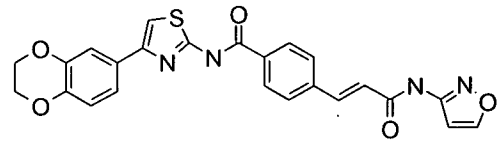
Example 153



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-furanylmethyl)thiophenyl)-acrylamide (Compound 253)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, Acetone) 11.30 (s, 1H), 7.98 (dd, J = 8.9, 5.5 Hz, 2H), 7.80 (d, J = 15.6 Hz, 1H), 7.63 (d, J = 8.4 Hz, 2H), 7.49 (s, 1H), 7.49 (dd, J = 2.1, 0.7 Hz, 1H), 7.46 (d, J = 8.4 Hz, 2H), 7.18 (t, J = 8.9 Hz, 2H), 7.07 (d, J = 15.6 Hz, 1H), 6.34 (dd, J = 3.2, 2.1 Hz, 1H), 6.30 (dd, J = 3.2, 0.7 Hz, 1H), 4.33 (s, 2H).

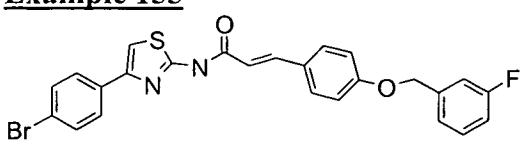
Example 154



N-(3-Isoxazolyl)-3(E)-[4-(1,4-benzodioxan-6-yl)thiazol-2-yl]aminocarbonyl-phenylacrylamide (Compound 254)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.80 (s, 1H), 11.39 (s, 1H), 8.85 (d, J = 1.6 Hz, 1H), 8.19 (d, J = 8.4 Hz, 2H), 7.79 (d, J = 8.4 Hz, 2H), 7.75 (d, J = 15.9 Hz, 1H), 7.57 (s, 1H), 7.46 (d, J = 2.0 Hz, 1H), 7.44 (dd, J = 8.3, 2.0 Hz, 1H), 7.06 (d, J = 1.6 Hz, 1H), 7.01 (d, J = 15.9 Hz, 1H), 6.92 (d, J = 8.3 Hz, 1H), 4.28 (s, 4H).

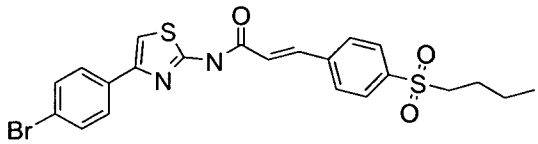
Example 155



N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 255)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, Acetone) 11.27 (s, 1H), 7.89 (d, J = 8.5 Hz, 2H), 7.80 (d, J = 15.6 Hz, 1H), 7.67 (d, J = 8.5 Hz, 2H), 7.59 (d, J = 8.5 Hz, 2H), 7.57 (s, 1H), 7.46 (td, J = 7.8, 6.3 Hz, 1H), 7.34 (d, J = 7.8 Hz, 1H), 7.29 (m, 1H), 7.13 (d, J = 8.5 Hz, 2H), 7.11 (m, 1H), 6.95 (d, J = 15.6 Hz, 1H), 5.25 (s, 2H).

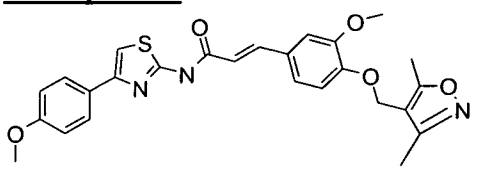
Example 156



N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 256)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, Acetone) 11.48 (s, 1H), 8.00 (d, J = 8.5 Hz, 2H), 7.96 (d, J = 8.5 Hz, 2H), 7.92 (d, J = 15.7 Hz, 1H), 7.90 (d, J = 8.5 Hz, 2H), 7.63 (s, 1H), 7.60 (d, J = 8.5 Hz, 2H), 7.26 (d, J = 15.7 Hz, 1H), 3.25 (t, J = 7.9 Hz, 2H), 1.65 (m, 2H), 1.42 (m, 2H), 0.89 (t, J = 7.3 Hz, 3H).

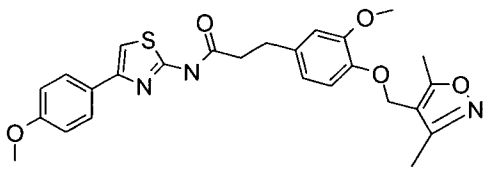
Example 157



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)methoxyphenyl)acrylamide (Compound 257)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, DMSO) 12.36 (s, 1H), 7.85 (d, J = 8.7 Hz, 2H), 7.68 (d, J = 15.8 Hz, 1H), 7.49 (s, 1H), 7.27-7.13 (m, 3H), 7.00 (d, J = 8.7 Hz, 2H), 6.85 (d, J = 15.8 Hz, 1H), 4.97 (s, 2H), 3.82 (s, 3H), 3.80 (s, 3H), 2.40 (s, 3H), 2.22 (s, 3H).

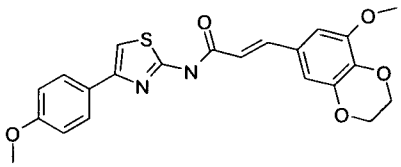
Example 158



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)-methoxyphenyl)propionamide (Compound 258)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 10.95 (br s, 1H), 7.68 (d, J = 8.3 Hz, 2H), 6.99 (s, 1H), 6.90 (d, J = 8.3 Hz, 2H), 6.82 (d, J = 8.4 Hz, 1H), 6.74 (d, J = 8.0 Hz, 1H), 6.59 (s, 1H), 6.45 (d, J = 8.0 Hz, 1H), 4.78 (s, 2H), 3.81 (s, 3H), 3.75 (s, 3H), 2.83 (t, J = 7.3 Hz, 2H), 2.41 (t, J = 7.3 Hz, 2H), 2.33 (s, 3H), 2.28 (s, 3H).

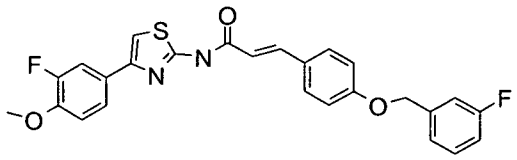
Example 159



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(8-methoxy-1,4-benzodioxan-6-yl)-acrylamide (Compound 259)

This compound was prepared as described in Scheme III. ^{1}H NMR (500MHz, DMSO) 12.33 (s, 1H), 7.84 (d, J = 8.9 Hz, 2H), 7.60 (d, J = 15.6 Hz, 1H), 7.48 (s, 1H), 7.00 (d, J = 8.9 Hz, 2H), 6.87 (d, J = 1.7 Hz, 1H), 6.81 (d, J = 1.7 Hz, 1H), 6.79 (d, J = 15.6 Hz, 1H), 4.29-4.25 (m, 4H), 3.82 (s, 3H), 3.79 (s, 3H).

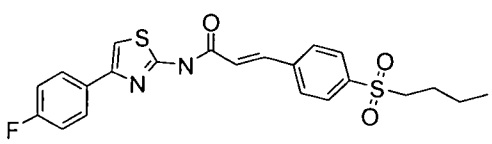
Example 160



N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)-phenyl)acrylamide (Compound 260)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, Acetone) 11.22 (s, 1H), 7.80 (d, J = 15.6 Hz, 1H), 7.67 (d, J = 8.8 Hz, 2H), 7.72-7.61 (m, 2H), 7.46 (td, J = 8.0, 6.0 Hz, 1H), 7.44 (s, 1H), 7.34 (m, 1H), 7.29 (m, 1H), 7.18 (t, J = 8.5 Hz, 1H), 7.13 (d, J = 8.8 Hz, 2H), 7.12 (m, 1H), 6.96 (d, J = 15.6 Hz, 1H), 5.25 (s, 2H), 3.92 (s, 3H).

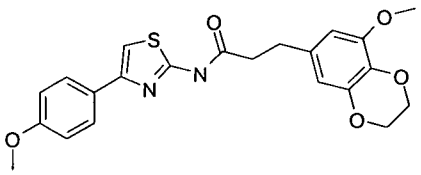
Example 161



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 261)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, Acetone) 11.45 (s, 1H), 8.02-7.95 (m, 6H), 7.92 (d, J = 15.8 Hz, 1H), 7.53 (s, 1H), 7.26 (d, J = 15.8 Hz, 1H), 7.19 (t, J = 8.9 Hz, 2H), 3.25 (t, J = 7.9 Hz, 2H), 1.65 (m, 2H), 1.43 (m, 2H), 0.89 (t, J = 7.3 Hz, 3H).

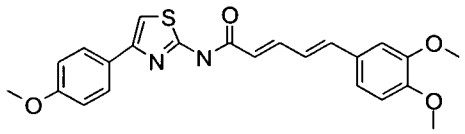
Example 162



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(8-methoxy-1,4-benzodioxan-6-yl)propionamide (Compound 262)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 7.63 (d, J = 8.8 Hz, 2H), 6.92 (s, 1H), 6.85 (d, J = 8.8 Hz, 2H), 6.22 (s, 2H), 4.22 (m, 2H), 4.17 (m, 2H), 3.77 (s, 3H), 3.75 (s, 3H), 2.82 (t, J = 7.6 Hz, 2H), 2.50 (t, J = 7.6 Hz, 2H).

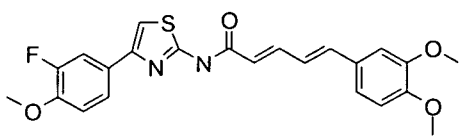
Example 163



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 263)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.43 (s, 1H), 7.84 (d, J = 8.8 Hz, 2H), 7.48 (s, 1H), 7.48 (dd, J = 14.9, 10.5 Hz, 1H), 7.29 (d, J = 1.9 Hz, 1H), 7.12 (dd, J = 8.5, 1.9 Hz, 1H), 7.10 (dd, J = 15.4, 10.5 Hz, 1H), 7.04 (d, J = 15.4 Hz, 1H), 7.00 (d, J = 8.8 Hz, 2H), 6.97 (d, J = 8.5 Hz, 1H), 6.40 (d, J = 14.9 Hz, 1H), 3.82 (s, 3H), 3.79 (s, 3H), 3.79 (s, 3H).

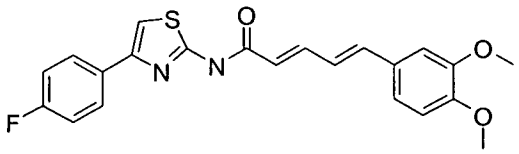
Example 164



N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)- 2(E),4(E)-pentadienamide (Compound 264)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.44 (s, 1H), 7.74-7.69 (m, 2H), 7.60 (s, 1H), 7.48 (dd, J = 15.0, 10.4 Hz, 1H), 7.29 (d, J = 2.0 Hz, 1H), 7.23 (dd, J = 9.0, 8.8 Hz, 1H) ,7.12 (dd, J = 8.4, 2.0 Hz, 1H), 7.09 (dd, J = 15.4, 10.4 Hz, 1H), 7.04 (d, J = 15.4 Hz, 1H), 6.97 (d, J = 8.4 Hz, 1H), 6.40 (d, J = 15.0 Hz, 1H), 3.88 (s, 3H), 3.82 (s, 3H), 3.79 (s, 3H).

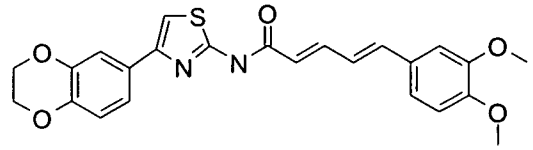
Example 165



N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 265)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.47 (s, 1H), 7.95 (dd, J = 8.9, 5.6 Hz, 2H), 7.63 (s, 1H), 7.49 (dd, J = 15.0, 10.4 Hz, 1H), 7.29 (d, J = 2.0 Hz, 1H), 7.27 (t, J = 8.9 Hz, 2H), 7.12 (dd, J = 8.4, 2.0 Hz, 1H), 7.11 (dd, J = 15.1, 10.4 Hz, 1H), 7.04 (d, J = 15.1 Hz, 1H), 6.97 (d, J = 8.4 Hz, 1H), 6.40 (d, J = 15.0 Hz, 1H), 3.82 (s, 3H), 3.79 (s, 3H).

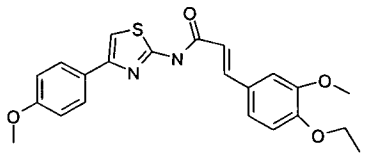
Example 166



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 266)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.38 (s, 1H), 7.48 (s, 1H), 7.47 (dd, J = 14.9, 10.5 Hz, 1H), 7.40 (d, J = 2.1 Hz, 1H), 7.38 (dd, J = 8.4, 2.1 Hz, 1H), 7.27 (d, J = 1.8 Hz, 1H), 7.10 (dd, J = 8.4, 1.8 Hz, 1H), 7.08 (dd, J = 15.6, 10.5 Hz, 1H), 7.02 (d, J = 15.6 Hz, 1H), 6.95 (d, J = 8.4 Hz, 1H), 6.88 (d, J = 8.4 Hz, 1H), 6.38 (d, J = 14.9 Hz, 1H), 4.26 (s, 4H), 3.81 (s, 3H), 3.77 (s, 3H).

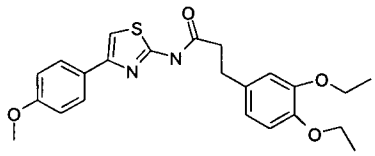
Example 167



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-ethoxyphenyl)-acrylamide (Compound 267)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.48 (s, 1H), 7.78 (d, J = 8.8 Hz, 2H), 7.70 (d, J = 15.5 Hz, 1H), 7.08 (s, 1H), 6.94-6.87 (m, 4H), 6.82 (d, J = 8.1 Hz, 1H), 6.22 (d, J = 15.5 Hz, 1H), 4.14 (q, J = 6.8 Hz, 2H), 3.88 (s, 3H), 3.76 (s, 3H), 1.49 (t, J = 6.8 Hz, 3H).

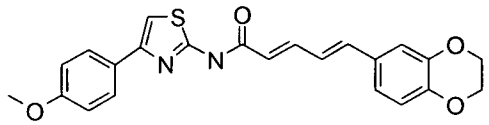
Example 168



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3,4-diethoxyphenyl)propionamide (Compound 268)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 11.41 (s, 1H), 7.58 (d, J = 8.5 Hz, 2H), 6.90 (s, 1H), 6.81 (d, J = 8.5 Hz, 2H), 6.61 (d, J = 8.2 Hz, 1H), 6.47 (s, 1H), 6.33 (d, J = 8.2 Hz, 1H), 4.04 (q, J = 7.1 Hz, 2H), 3.96 (q, J = 7.1 Hz, 2H), 3.73 (s, 3H), 2.71 (t, J = 7.6 Hz, 2H), 2.26 (t, J = 7.6 Hz, 2H), 1.35 (t, J = 7.1 Hz, 3H), 1.18 (t, J = 7.1 Hz, 3H).

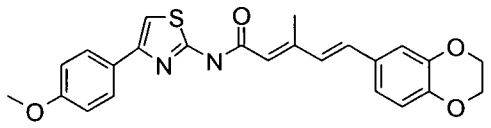
Example 169



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 269)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.41 (s, 1H), 7.84 (d, J = 8.9 Hz, 2H), 7.47 (s, 1H), 7.45 (ddd, J = 15.0, 9.1, 1.4 Hz, 1H), 7.17 (d, J = 2.0 Hz, 1H), 7.11 (dd, J = 8.4, 2.0 Hz, 1H), 7.03 (dd, J = 15.5, 9.1 Hz, 1H), 6.99 (dd, J = 15.5, 1.4 Hz, 1H), 6.99 (d, J = 8.9 Hz, 2H), 6.87 (d, J = 8.4 Hz, 1H), 6.40 (d, J = 15.0 Hz, 1H), 4.29-4.24 (m, 4H), 3.79 (s, 3H).

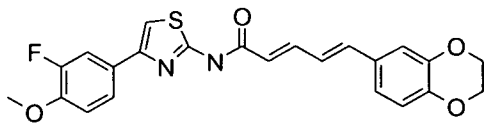
Example 170



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 270)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.35 (s, 1H), 7.84 (d, J = 8.9 Hz, 2H), 7.45 (m, 1H), 7.17 (d, J = 2.0 Hz, 1H), 7.12 (dd, J = 8.4, 2.0 Hz, 1H), 7.00 (d, J = 16.0 Hz, 1H), 6.99 (d, J = 8.9 Hz, 2H), 6.87 (d, J = 8.4 Hz, 1H), 6.81 (d, J = 16.0 Hz, 1H), 6.24 (s, 1H), 4.29-4.25 (m, 4H), 3.79 (s, 3H), 2.43 (d, J = 1.0 Hz, 3H).

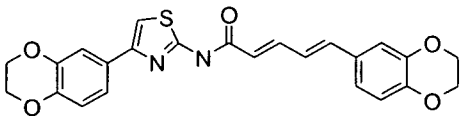
Example 171



N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 271)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.43 (s, 1H), 7.72 (dd, J = 13.0, 2.1 Hz, 1H), 7.71 (ddd, J = 8.9, 2.1, 0.9 Hz, 1H), 7.60 (s, 1H), 7.45 (ddd, J = 14.9, 8.8, 1.3 Hz, 1H), 7.23 (t, J = 8.9 Hz, 1H), 7.17 (d, J = 2.2 Hz, 1H), 7.11 (dd, J = 8.4, 2.2 Hz, 1H), 7.04 (dd, J = 15.3, 8.8 Hz, 1H), 6.99 (dd, J = 15.3, 1.3 Hz, 1H), 6.87 (d, J = 8.4 Hz, 1H), 6.40 (d, J = 14.9 Hz, 1H), 4.29-4.24 (m, 4H), 3.88 (s, 3H).

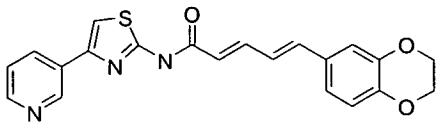
Example 172



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 272)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, DMSO) 12.39 (s, 1H), 7.51-7.36 (m, 4H), 7.17 (d, J = 2.1 Hz, 1H), 7.11 (dd, J = 8.4, 2.1 Hz, 1H), 7.03-6.99 (m, 2H), 6.90 (m, 1H), 6.87 (d, J = 8.4 Hz, 1H), 6.39 (d, J = 15.1 Hz, 1H), 4.29-4.25 (m, 8H).

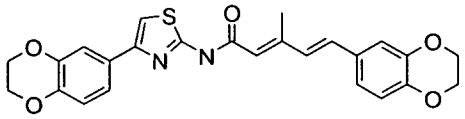
Example 173



N-[4-(3-Pyridyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 273)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.53 (s, 1H), 9.13 (br s, 1H), 8.53 (m, 1H), 8.24 (m, 1H), 7.84 (m, 1H), 7.50-7.44 (m, 2H), 7.18 (d, J = 2.2 Hz, 1H), 7.11 (dd, J = 8.3, 2.2 Hz, 1H), 7.04 (dd, J = 15.6, 9.0 Hz, 1H), 7.00 (dd, J = 15.6, 1.5 Hz, 1H), 6.87 (d, J = 8.3 Hz, 1H), 6.41 (d, J = 14.9 Hz, 1H), 4.30-4.24 (m, 4H).

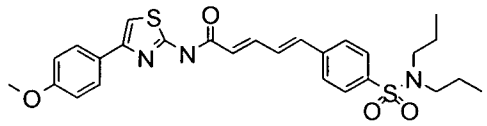
Example 174



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 274)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.32 (s, 1H), 7.46 (s, 1H), 7.40 (d, J = 2.0 Hz, 1H), 7.38 (dd, J = 8.3, 2.0 Hz, 1H), 7.16 (d, J = 2.0 Hz, 1H), 7.12 (dd, J = 8.3, 2.0 Hz, 1H), 7.00 (d, J = 16.1 Hz, 1H), 6.90 (d, J = 8.3 Hz, 1H), 6.87 (d, J = 8.3 Hz, 1H), 6.81 (d, J = 16.1 Hz, 1H), 6.24 (m, 1H), 4.27 (m, 8H), 2.42 (d, J = 1.0 Hz, 3H).

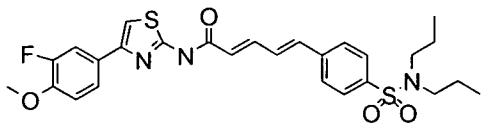
Example 175



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 275)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.54 (s, 1H), 7.85 (d, J = 8.8 Hz, 2H), 7.83 (d, J = 8.5 Hz, 2H), 7.78 (d, J = 8.5 Hz, 2H), 7.52 (dd, J = 14.9, 11.0 Hz, 1H), 7.50 (s, 1H), 7.35 (dd, J = 15.5, 11.0 Hz, 1H), 7.20 (d, J = 15.5 Hz, 1H), 7.00 (d, J = 8.8 Hz, 2H), 6.55 (d, J = 14.9 Hz, 1H), 3.79 (s, 3H), 3.04 (m, 4H), 1.47 (m, 4H), 0.81 (t, J = 7.4 Hz, 6H).

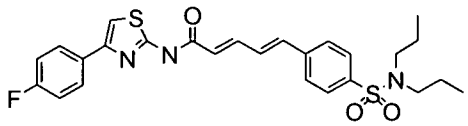
Example 176



N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 276)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.56 (s, 1H), 7.83 (d, J = 8.5 Hz, 2H), 7.78 (d, J = 8.5 Hz, 2H), 7.75-7.70 (m, 2H), 7.62 (s, 1H), 7.52 (dd, J = 14.9, 11.0 Hz, 1H), 7.35 (dd, J = 15.2, 11.0 Hz, 1H), 7.24 (t, J = 8.8 Hz, 1H), 7.20 (d, J = 15.2 Hz, 1H), 6.55 (d, J = 14.9 Hz, 1H), 3.88 (s, 3H), 3.04 (m, 4H), 1.47 (sext, J = 7.5 Hz, 4H), 0.81 (t, J = 7.5 Hz, 6H).

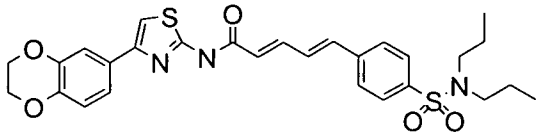
Example 177



N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 277)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.58 (s, 1H), 7.95 (dd, J = 8.9, 5.6 Hz, 2H), 7.83 (d, J = 8.5 Hz, 2H), 7.78 (d, J = 8.5 Hz, 2H), 7.66 (s, 1H), 7.53 (dd, J = 14.8, 11.0 Hz, 1H), 7.35 (dd, J = 15.4, 11.0 Hz, 1H), 7.28 (t, J = 8.9 Hz, 2H), 7.21 (d, J = 15.4 Hz, 1H), 6.55 (d, J = 14.8 Hz, 1H), 3.04 (m, 4H), 1.47 (sext, J = 7.4 Hz, 4H), 0.81 (t, J = 7.4 Hz, 6H).

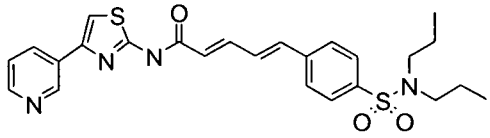
Example 178



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 278)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.52 (s, 1H), 7.84 (s, 1H), 7.83 (d, J = 8.5 Hz, 2H), 7.78 (d, J = 8.5 Hz, 2H), 7.52 (s, 1H), 7.52 (dd, J = 14.8, 11.0 Hz, 1H), 7.40 (d, J = 2.1 Hz, 1H), 7.39 (dd, J = 8.2, 2.1 Hz, 1H), 7.34 (dd, J = 15.5, 11.0 Hz, 1H), 7.20 (d, J = 15.5 Hz, 1H), 6.90 (d, J = 8.2 Hz, 1H), 6.54 (d, J = 14.8 Hz, 1H), 4.27 (s, 4H), 3.04 (t, J = 7.5 Hz, 4H), 1.47 (sext, J = 7.5 Hz, 4H), 0.81 (t, J = 7.5 Hz, 6H).

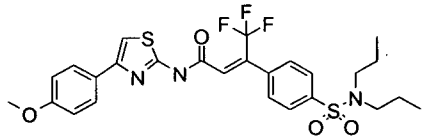
Example 179



N-[4-(3-Pyridyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 279)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.65 (s, 1H), 9.14 (dd, J = 2.3, 0.8 Hz, 1H), 8.54 (dd, J = 4.7, 1.7 Hz, 1H), 8.25 (ddd, J = 7.9, 2.3, 1.7 Hz, 1H), 7.86 (s, 1H), 7.83 (d, J = 8.7 Hz, 2H), 7.78 (d, J = 8.7 Hz, 2H), 7.54 (dd, J = 14.9, 11.0 Hz, 1H), 7.48 (ddd, J = 7.9, 4.7, 0.8 Hz, 1H), 7.36 (dd, J = 15.4, 11.0 Hz, 1H), 7.21 (d, J = 15.4 Hz, 1H), 6.56 (d, J = 14.9 Hz, 1H), 3.04 (t, J = 7.5 Hz, 4H), 1.47 (sext, J = 7.5 Hz, 4H), 0.81 (t, J = 7.5 Hz, 6H).

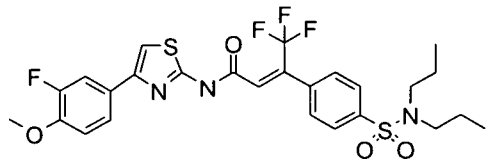
Example 180



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylaminosulfonyl-phenyl)-3-trifluoromethylacrylamide (Compound 280)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.80 (s, 1H), 7.86 (d, J = 8.4 Hz, 2H), 7.80 (d, J = 9.0 Hz, 2H), 7.57 (d, J = 8.4 Hz, 2H), 7.51 (s, 1H), 7.22 (q, J = 1.2 Hz, 1H), 6.98 (d, J = 9.0 Hz, 2H), 3.78 (s, 3H), 3.02 (t, J = 7.5 Hz, 4H), 1.42 (sext, J = 7.5 Hz, 4H), 0.77 (t, J = 7.5 Hz, 6H).

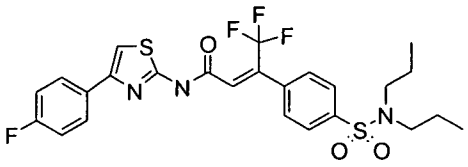
Example 181



N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 281)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.82 (s, 1H), 7.86 (d, J = 8.4 Hz, 2H), 7.71-7.65 (m, 2H), 7.62 (s, 1H), 7.57 (d, J = 8.4 Hz, 2H), 7.25-7.20 (m, 2H), 3.87 (s, 3H), 3.02 (t, J = 7.4 Hz, 4H), 1.42 (sext, J = 7.4 Hz, 4H), 0.77 (t, J = 7.4 Hz, 6H).

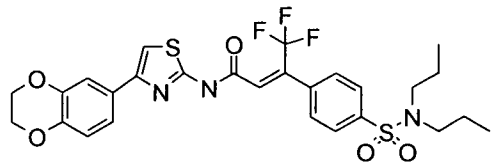
Example 182



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 282)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.83 (s, 1H), 7.91 (dd, J = 8.9, 5.5 Hz, 2H), 7.86 (d, J = 8.4 Hz, 2H), 7.66 (s, 1H), 7.57 (d, J = 8.4 Hz, 2H), 7.26 (t, J = 8.9 Hz, 2H), 7.23 (q, J = 1.5 Hz, 1H), 3.02 (t, J = 7.4 Hz, 4H), 1.42 (sext, J = 7.4 Hz, 4H), 0.77 (t, J = 7.4 Hz, 6H).

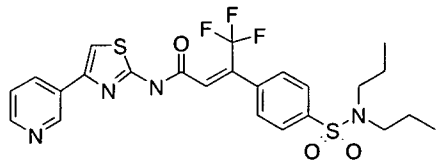
Example 183



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 283)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.77 (s, 1H), 7.86 (d, J = 8.5 Hz, 2H), 7.57 (d, J = 8.5 Hz, 2H), 7.52 (s, 1H), 7.36 (dd, J = 2.1, 0.4 Hz, 1H), 7.35 (dd, J = 8.2, 2.1 Hz, 1H), 7.21 (q, J = 1.5 Hz, 1H), 6.89 (dd, J = 8.2, 0.4 Hz, 1H), 5.76 (s, 1H), 4.26 (s, 4H), 3.02 (t, J = 7.4 Hz, 4H), 1.42 (sext, J = 7.4 Hz, 4H), 0.77 (t, J = 7.4 Hz, 6H).

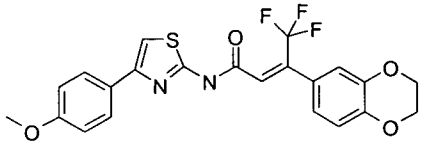
Example 184



N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoro-methylacrylamide (Compound 284)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.91 (s, 1H), 9.09 (dd, J = 2.2, 0.7 Hz, 1H), 8.53 (dd, J = 4.8, 1.7 Hz, 1H), 8.21 (ddd, J = 8.0, 2.2, 1.7 Hz, 1H), 7.87 (d, J = 8.2 Hz, 2H), 7.86 (s, 1H), 7.58 (d, J = 8.2 Hz, 2H), 7.47 (ddd, J = 8.0, 4.8, 0.7 Hz, 1H), 7.23 (q, J = 1.2 Hz, 1H), 3.02 (t, J = 7.4 Hz, 4H), 1.42 (sext, J = 7.4 Hz, 4H), 0.77 (t, J = 7.4 Hz, 6H).

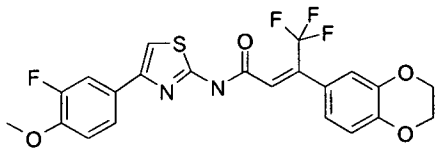
Example 185



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 285)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.73 (s, 1H), 7.82 (d, J = 9.0 Hz, 2H), 7.50 (s, 1H), 7.07 (m, 1H), 6.99 (d, J = 9.0 Hz, 2H), 6.90 (d, J = 8.3 Hz, 1H), 6.84 (d, J = 2.2 Hz, 1H), 6.79 (dd, J = 8.3, 2.2 Hz, 1H), 4.30-4.25 (m, 4H), 3.79 (s, 3H).

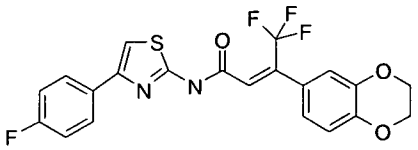
Example 186



N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 286)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.75 (s, 1H), 7.70 (dd, J = 12.9, 2.0 Hz, 1H), 7.68 (m, 1H), 7.62 (s, 1H), 7.23 (t, J = 8.8 Hz, 1H), 7.07 (m, 1H), 6.90 (d, J = 8.3 Hz, 1H), 6.84 (d, J = 2.0 Hz, 1H), 6.79 (dd, J = 8.3, 2.0 Hz, 1H), 4.30-4.25 (m, 4H), 3.87 (s, 3H).

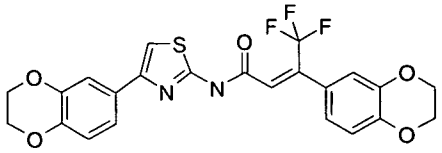
Example 187



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 287)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.77 (s, 1H), 7.92 (dd, J = 9.0, 5.4 Hz, 2H), 7.66 (s, 1H), 7.27 (t, J = 9.0 Hz, 2H), 7.07 (m, 1H), 6.90 (d, J = 8.3 Hz, 1H), 6.84 (d, J = 2.0 Hz, 1H), 6.79 (dd, J = 8.3, 2.0 Hz, 1H), 4.30-4.25 (m, 4H).

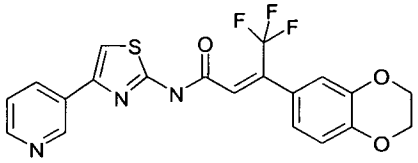
Example 188



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 288)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.71 (s, 1H), 7.52 (s, 1H), 7.38-7.34 (m, 2H), 7.06 (m, 1H), 6.90 (d, J = 8.3 Hz, 1H), 6.90 (d, J = 8.1 Hz, 1H), 6.84 (d, J = 2.0 Hz, 1H), 6.78 (dd, J = 8.3, 2.0 Hz, 1H), 4.30-4.25 (m, 8H).

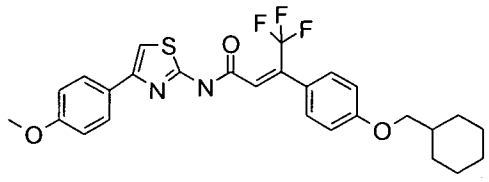
Example 189



N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethyl-acrylamide (Compound 289)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.85 (s, 1H), 9.11 (dd, J = 2.2, 0.9 Hz, 1H), 8.53 (dd, J = 4.8, 1.7 Hz, 1H), 8.22 (ddd, J = 7.9, 2.2, 1.7 Hz, 1H), 7.85 (s, 1H), 7.47 (ddd, J = 7.9, 4.8, 0.9 Hz, 1H), 7.08 (m, 1H), 6.91 (d, J = 8.3 Hz, 1H), 6.85 (d, J = 2.0 Hz, 1H), 6.79 (dd, J = 8.3, 2.0 Hz, 1H), 4.30-4.25 (m, 4H).

Example 190

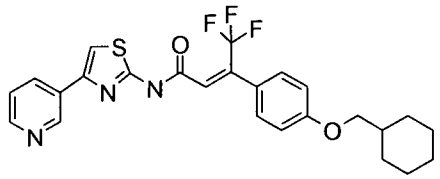


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoro-methylacrylamide (Compound 290)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.73 (s, 1H), 7.81 (d, J = 8.8 Hz, 2H), 7.49 (s, 1H), 7.25 (d, J = 8.8 Hz, 2H), 7.07 (m, 1H), 6.99 (d, J = 8.8 Hz, 2H), 6.97 (d, J = 8.8 Hz, 2H), 3.80 (d, J = 6.3 Hz,

2H), 3.79 (s, 3H), 1.81 (m, 2H), 1.76-1.68 (m, 3H), 1.65 (m, 1H), 1.30-1.12 (m, 3H), 1.04 (m, 2H).

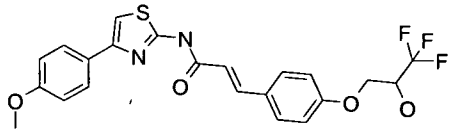
Example 191



N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoromethylacrylamide (Compound 291)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.84 (s, 1H), 9.10 (dd, J = 2.2, 0.7 Hz, 1H), 8.53 (dd, J = 4.8, 1.7 Hz, 1H), 8.22 (ddd, J = 8.0, 2.2, 1.7 Hz, 1H), 7.84 (s, 1H), 7.47 (ddd, J = 8.0, 4.8, 0.7 Hz, 1H), 7.26 (d, J = 8.7 Hz, 2H), 7.08 (q, J = 1.2 Hz, 1H), 6.97 (d, J = 8.7 Hz, 2H), 3.80 (d, J = 6.3 Hz, 2H), 1.81 (m, 2H), 1.76-1.62 (m, 4H), 1.30-1.12 (m, 3H), 1.04 (m, 2H).

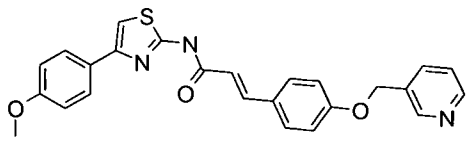
Example 192



(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoro-propyloxy)phenyl)acrylamide (Compound 292)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.41 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.69 (d, J = 15.7 Hz, 1H), 7.61 (d, J = 8.9 Hz, 2H), 7.49 (s, 1H), 7.09 (d, J = 8.9 Hz, 2H), 7.00 (d, J = 8.9 Hz, 2H), 6.81 (d, J = 15.7 Hz, 1H), 6.70 (d, J = 6.6 Hz, 1H), 4.43 (m, 1H), 4.25 (dd, J = 10.5, 4.1 Hz, 1H), 4.14 (dd, J = 10.5, 6.6 Hz, 1H), 3.79 (s, 3H).

Example 193

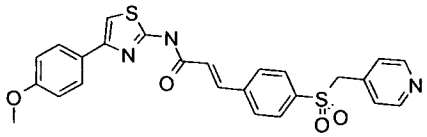


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-pyridylmethoxy)phenyl)-acrylamide (Compound 293)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 8.69 (m, 1H), 8.56 (dd, J = 4.6, 1.5 Hz, 1H), 7.89 (m, 1H), 7.83 (d, J = 8.8

Hz, 2H), 7.51 (d, J = 8.8 Hz, 2H), 7.44 (m, 1H), 7.29 (m, 1H), 7.06 (d, J = 8.8 Hz, 2H), 6.93 (s, 1H), 6.92 (d, J = 8.8 Hz, 2H), 6.63 (d, J = 15.9 Hz, 1H), 5.19 (s, 2H), 3.77 (s, 3H).

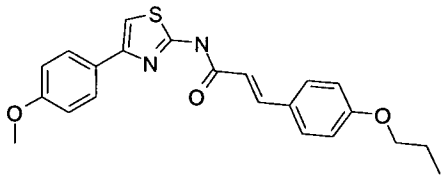
Example 194



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-pyridylmethylsulfonyl)phenyl)-acrylamide (Compound 294)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 8.56 (m, 2H), 7.78 (d, J = 8.8 Hz, 2H), 7.77 (d, J = 15.6 Hz, 1H), 7.63 (d, J = 8.3 Hz, 2H), 7.41 (d, J = 8.3 Hz, 2H), 7.13 (s, 1H), 7.08 (m, 2H), 6.92 (d, J = 8.8 Hz, 2H), 6.50 (d, J = 15.6 Hz, 1H), 4.32 (s, 2H), 3.79 (s, 3H).

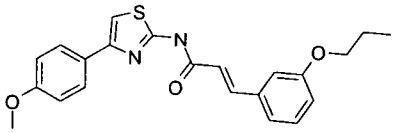
Example 195



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propyloxyphenyl)acrylamide (Compound 295)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.52 (s, 1H), 7.84 (d, J = 8.8 Hz, 2H), 7.65 (d, J = 15.5 Hz, 1H), 7.13 (s, 1H), 7.05 (d, J = 8.8 Hz, 2H), 6.90 (d, J = 8.8 Hz, 2H), 6.78 (d, J = 8.8 Hz, 2H), 6.04 (d, J = 15.5 Hz, 1H), 3.94 (t, J = 6.6 Hz, 2H), 3.71 (s, 3H), 1.83 (m, 2H), 1.05 (t, J = 7.4 Hz, 3H).

Example 196

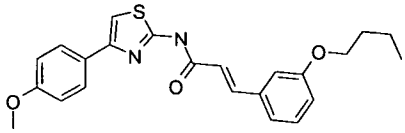


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-propyloxyphenyl)acrylamide (Compound 296)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.67 (s, 1H), 7.80 (d, J = 8.9 Hz, 2H), 7.65 (d, J = 15.5 Hz, 1H), 7.18 (t, J =

7.9 Hz, 1H), 7.13 (s, 1H), 6.88 (m, 1H), 6.87 (d, J = 8.9 Hz, 2H), 6.73 (dd, J = 2.2, 1.6 Hz, 1H), 6.67 (m, 1H), 6.14 (d, J = 15.5 Hz, 1H), 3.90 (t, J = 6.6 Hz, 2H), 3.70 (s, 3H), 1.84 (m, 2H), 1.07 (t, J = 7.4 Hz, 3H).

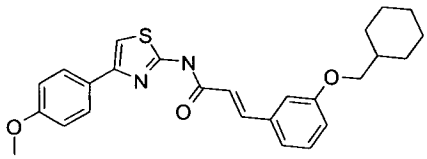
Example 197



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-butyloxyphenyl)acrylamide (Compound 297)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.54 (s, 1H), 7.80 (d, J = 9.0 Hz, 2H), 7.66 (d, J = 15.6 Hz, 1H), 7.18 (t, J = 7.9 Hz, 1H), 7.12 (s, 1H), 6.89 (m, 1H), 6.87 (d, J = 9.0 Hz, 2H), 6.75 (dd, J = 2.3, 1.7 Hz, 1H), 6.69 (m, 1H), 6.16 (d, J = 15.6 Hz, 1H), 3.94 (t, J = 6.5 Hz, 2H), 3.71 (s, 3H), 1.79 (m, 2H), 1.53 (m, 2H), 1.01 (t, J = 7.3 Hz, 3H).

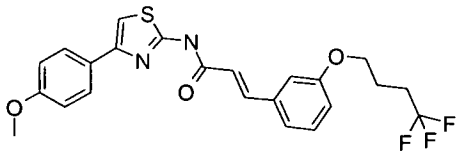
Example 198



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-cyclohexymethoxyphenyl)-acrylamide (Compound 298)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.66 (s, 1H), 7.80 (d, J = 8.8 Hz, 2H), 7.65 (d, J = 15.6 Hz, 1H), 7.17 (t, J = 7.9 Hz, 1H), 7.12 (s, 1H), 6.88 (m, 1H), 6.86 (d, J = 8.8 Hz, 2H), 6.74 (t, J = 1.5 Hz, 1H), 6.67 (m, 1H), 6.14 (d, J = 15.6 Hz, 1H), 3.73 (d, J = 6.6 Hz, 2H), 3.70 (s, 3H), 1.90 (m, 2H), 1.83-1.76 (m, 2H), 1.73 (m, 1H), 1.38-1.18 (m, 4H), 1.08 (m, 2H).

Example 199

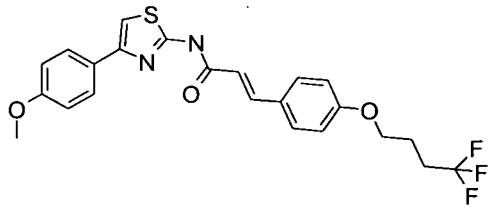


N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4,4,4-trifluorobutyloxy)phenyl)-acrylamide (Compound 299)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.77 (br s, 1H), 7.80 (d, J = 9.0 Hz, 2H), 7.64 (d, J = 15.5 Hz, 1H), 7.19 (t, J =

7.9 Hz, 1H), 7.13 (s, 1H), 6.87 (m, 1H), 6.86 (d, J = 9.0 Hz, 2H), 6.72 (dd, J = 2.2, 1.6 Hz, 1H), 6.67 (m, 1H), 6.15 (d, J = 15.5 Hz, 1H), 3.99 (t, J = 6.0 Hz, 2H), 3.70 (s, 3H), 2.33 (m, 2H), 2.08 (m, 2H).

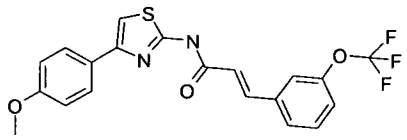
Example 200



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4,4,4-trifluorobutyloxy)phenyl)-acrylamide (Compound 300)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.70 (s, 1H), 7.84 (d, J = 9.0 Hz, 2H), 7.64 (d, J = 15.5 Hz, 1H), 7.14 (s, 1H), 7.02 (d, J = 8.5 Hz, 2H), 6.90 (d, J = 9.0 Hz, 2H), 6.77 (d, J = 8.5 Hz, 2H), 6.03 (d, J = 15.5 Hz, 1H), 4.04 (t, J = 6.0 Hz, 2H), 3.71 (s, 3H), 2.32 (m, 2H), 2.07 (m, 2H).

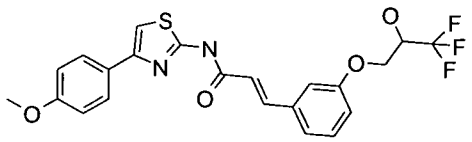
Example 201



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-trifluoromethoxyphenyl)-acrylamide (Compound 301)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.51 (s, 1H), 7.83 (d, J = 8.9 Hz, 2H), 7.61 (d, J = 15.6 Hz, 1H), 7.28 (t, J = 7.9 Hz, 1H), 7.19 (s, 1H), 7.18 (m, 1H), 6.93 (m, 1H), 6.86 (d, J = 8.9 Hz, 2H), 6.85 (m, 1H), 6.07 (d, J = 15.6 Hz, 1H), 3.66 (s, 3H).

Example 202

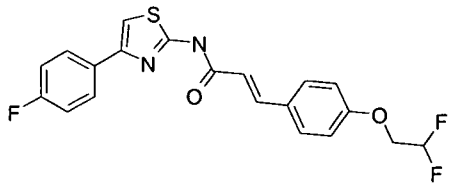


(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2-hydroxy-3,3,3-trifluoropropyloxy)phenyl)acrylamide (Compound 302)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.78 (d, J = 8.8 Hz, 2H), 7.63 (d, J = 15.6 Hz, 1H), 7.20 (dd, J = 8.1, 7.7 Hz,

1H), 7.12 (s, 1H), 6.89 (dd, J = 8.1, 2.3 Hz, 1H), 6.87 (d, J = 8.8 Hz, 2H), 6.76 (dd, J = 7.7, 1.5 Hz, 1H), 6.68 (dd, J = 2.3, 1.5 Hz, 1H), 6.13 (d, J = 15.6 Hz, 1H), 4.43 (m, 1H), 4.22 (dd, J = 9.9, 3.4 Hz, 1H), 4.16 (dd, J = 9.9, 6.5 Hz, 1H), 3.70 (s, 3H).

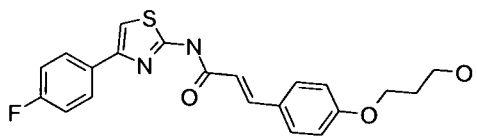
Example 203



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 303)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.12 (s, 1H), 7.85 (dd, J = 8.8, 5.2 Hz, 2H), 7.68 (d, J = 15.5 Hz, 1H), 7.19 (s, 1H), 7.16 (d, J = 8.7 Hz, 2H), 7.06 (t, J = 8.8 Hz, 2H), 6.84 (d, J = 8.7 Hz, 2H), 6.11 (d, J = 15.5 Hz, 1H), 4.21 (td, J = 12.9, 4.1 Hz, 2H), 6.11 (tt, J = 54.8, 4.1 Hz, 1H).

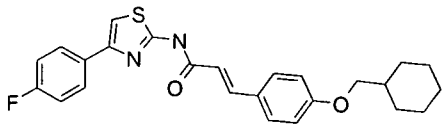
Example 204



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 304)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.39 (s, 1H), 7.83 (dd, J = 8.8, 5.4 Hz, 2H), 7.73 (d, J = 15.5 Hz, 1H), 7.28 (d, J = 8.8 Hz, 2H), 7.15 (s, 1H), 7.08 (dd, J = 8.8, 8.5 Hz, 2H), 6.87 (d, J = 8.8 Hz, 2H), 6.21 (d, J = 15.5 Hz, 1H), 4.17 (t, J = 6.0 Hz, 2H), 3.89 (t, J = 6.0 Hz, 2H), 2.08 (qn, J = 6.0 Hz, 2H).

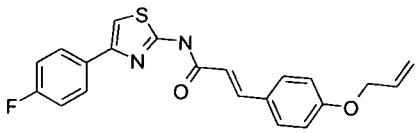
Example 205



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 305)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.89 (s, 1H), 7.85 (dd, J = 8.7, 5.4 Hz, 2H), 7.69 (d, J = 15.6 Hz, 1H), 7.17 (s, 1H), 7.15 (d, J = 8.6 Hz, 2H), 7.07 (t, J = 8.7 Hz, 2H), 6.81 (d, J = 8.6 Hz, 2H), 6.10 (d, J = 15.6 Hz, 1H), 3.78 (d, J = 6.3 Hz, 2H), 1.90-1.84 (m, 2H), 1.83-1.75 (m, 3H), 1.72 (m, 1H), 1.36-1.16 (m, 3H), 1.06 (m, 2H).

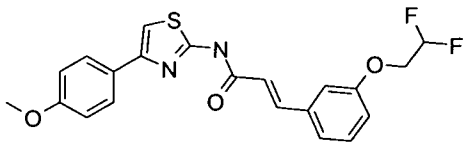
Example 206



N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 306)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.18 (br s, 1H), 7.86 (dd, J = 8.8, 5.2 Hz, 2H), 7.67 (d, J = 15.6 Hz, 1H), 7.18 (s, 1H), 7.12 (d, J = 8.8 Hz, 2H), 7.05 (t, J = 8.8 Hz, 2H), 6.83 (d, J = 8.8 Hz, 2H), 6.07 (d, J = 15.6 Hz, 1H), 6.05 (ddt, J = 17.1, 10.4, 5.3 Hz, 1H), 5.43 (dq, J = 17.1, 1.5 Hz, 1H), 5.33 (dq, J = 10.4, 1.5 Hz, 1H), 4.57 (dt, J = 5.3, 1.5 Hz, 2H).

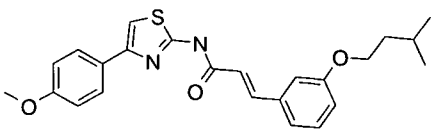
Example 207



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 307)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 12.23 (s, 1H), 7.82 (d, J = 8.9 Hz, 2H), 7.62 (d, J = 15.5 Hz, 1H), 7.20 (t, J = 7.9 Hz, 1H), 7.17 (s, 1H), 6.88 (m, 1H), 6.86 (d, J = 8.9 Hz, 2H), 6.70 (m, 1H), 6.64 (dd, J = 2.4, 1.6 Hz, 1H), 6.12 (tt, J = 54.9, 4.2 Hz, 1H), 6.10 (d, J = 15.5 Hz, 1H), 4.15 (td, J = 13.1, 4.2 Hz, 2H), 3.67 (s, 3H).

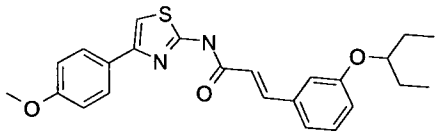
Example 208



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(3-methylbutoxy)phenyl)-acrylamide (Compound 308)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.69 (s, 1H), 7.80 (d, J = 8.8 Hz, 2H), 7.65 (d, J = 15.5 Hz, 1H), 7.18 (t, J = 7.9 Hz, 1H), 7.12 (s, 1H), 6.88 (m, 1H), 6.86 (d, J = 8.8 Hz, 2H), 6.73 (dd, J = 2.3, 1.7 Hz, 1H), 6.66 (m, 1H), 6.14 (d, J = 15.5 Hz, 1H), 3.96 (t, J = 6.8 Hz, 2H), 3.70 (s, 3H), 1.87 (m, 1H), 1.70 (q, J = 6.8 Hz, 2H), 0.99 (d, J = 6.8 Hz, 6H).

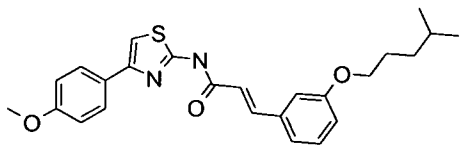
Example 209



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 309)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.68 (s, 1H), 7.80 (d, J = 8.9 Hz, 2H), 7.64 (d, J = 15.6 Hz, 1H), 7.16 (t, J = 7.9 Hz, 1H), 7.12 (s, 1H), 6.87 (d, J = 8.9 Hz, 2H), 6.87 (m, 1H), 6.75 (dd, J = 2.3, 1.7 Hz, 1H), 6.63 (m, 1H), 6.13 (d, J = 15.6 Hz, 1H), 4.09 (qn, J = 5.8 Hz, 1H), 3.70 (s, 3H), 1.69 (dq, J = 5.8, 7.4 Hz, 4H), 0.97 (t, J = 7.4 Hz, 6H).

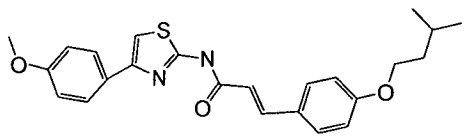
Example 210



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4-methylpentyloxy)phenyl)-acrylamide (Compound 310)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.70 (s, 1H), 7.80 (d, J = 8.9 Hz, 2H), 7.64 (d, J = 15.6 Hz, 1H), 7.17 (t, J = 7.9 Hz, 1H), 7.13 (s, 1H), 6.88 (m, 1H), 6.86 (d, J = 8.9 Hz, 2H), 6.73 (dd, J = 2.3, 1.6 Hz, 1H), 6.66 (m, 1H), 6.14 (d, J = 15.6 Hz, 1H), 3.92 (t, J = 6.6 Hz, 2H), 3.69 (s, 3H), 1.81 (m, 2H), 1.64 (m, 1H), 1.38 (m, 2H), 0.95 (d, J = 6.6 Hz, 6H).

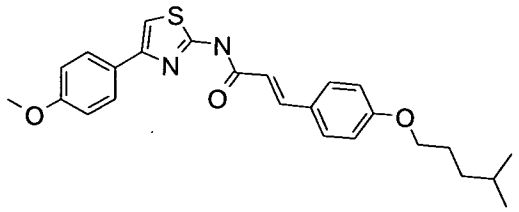
Example 211



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylbutoxy)phenyl)-acrylamide (Compound 311)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.81 (s, 1H), 7.84 (d, J = 9.0 Hz, 2H), 7.63 (d, J = 15.4 Hz, 1H), 7.13 (s, 1H), 6.99 (d, J = 8.8 Hz, 2H), 6.89 (d, J = 9.0 Hz, 2H), 6.76 (d, J = 8.8 Hz, 2H), 6.00 (d, J = 15.4 Hz, 1H), 4.00 (t, J = 6.6 Hz, 2H), 3.69 (s, 3H), 1.84 (m, 1H), 1.69 (q, J = 6.6 Hz, 2H), 0.98 (d, J = 6.6 Hz, 6H).

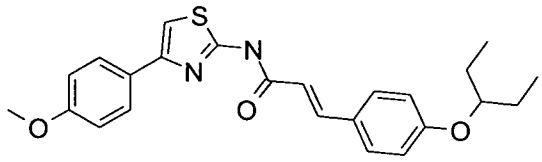
Example 212



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylpentyloxy)phenyl)-acrylamide (Compound 312)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.66 (s, 1H), 7.84 (d, J = 9.0 Hz, 2H), 7.64 (d, J = 15.4 Hz, 1H), 7.13 (s, 1H), 7.02 (d, J = 8.8 Hz, 2H), 6.90 (d, J = 9.0 Hz, 2H), 6.77 (d, J = 8.8 Hz, 2H), 6.02 (d, J = 15.4 Hz, 1H), 3.96 (t, J = 6.6 Hz, 2H), 3.70 (s, 3H), 1.80 (m, 2H), 1.62 (m, 1H), 1.34 (m, 2H), 0.93 (d, J = 6.6 Hz, 6H).

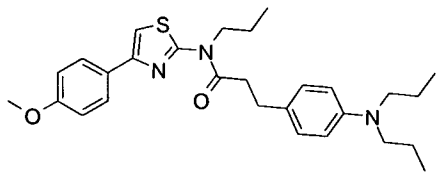
Example 213



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 313)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.47 (s, 1H), 7.84 (d, J = 8.8 Hz, 2H), 7.65 (d, J = 15.5 Hz, 1H), 7.13 (s, 1H), 7.04 (d, J = 8.8 Hz, 2H), 6.90 (d, J = 8.8 Hz, 2H), 6.78 (d, J = 8.8 Hz, 2H), 6.04 (d, J = 15.5 Hz, 1H), 4.15 (qn, J = 5.8 Hz, 1H), 3.71 (s, 3H), 1.69 (dq, J = 5.8, 7.4 Hz, 4H), 0.96 (t, J = 7.4 Hz, 6H).

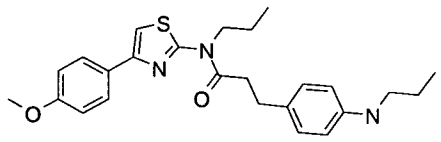
Example 214



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-dipropylaminophenyl)-propionamide (Compound 314)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.82 (d, J = 8.8 Hz, 2H), 7.09 (d, J = 8.4 Hz, 2H), 7.04 (s, 1H), 6.94 (d, J = 8.8 Hz, 2H), 6.60 (d, J = 8.4 Hz, 2H), 4.17 (t, J = 6.6 Hz, 2H), 3.84 (s, 3H), 3.21 (t, J = 7.5 Hz, 4H), 2.99 (m, 2H), 2.90 (m, 2H), 1.82 (m, 2H), 1.59 (sext, J = 7.5 Hz, 4H), 1.00 (t, J = 7.4 Hz, 3H), 0.92 (t, J = 7.5 Hz, 6H).

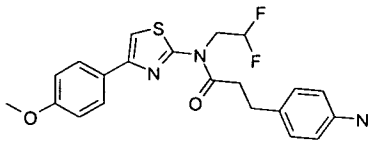
Example 215



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-propylaminophenyl)-propionamide (Compound 315)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.82 (d, J = 8.9 Hz, 2H), 7.06 (d, J = 8.3 Hz, 2H), 7.04 (s, 1H), 6.94 (d, J = 8.9 Hz, 2H), 6.57 (d, J = 8.3 Hz, 2H), 4.16 (t, J = 6.7 Hz, 2H), 3.85 (s, 3H), 3.07 (t, J = 7.1 Hz, 2H), 2.99 (m, 2H), 2.89 (m, 2H), 1.81 (m, 2H), 1.63 (m, 2H), 1.00 (t, J = 7.4 Hz, 3H), 0.99 (t, J = 7.4 Hz, 3H).

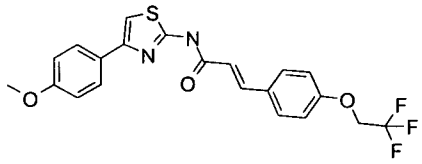
Example 216



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-(2,2-difluoroethyl)-3-(4-aminophenyl)-propionamide (Compound 316)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.77 (d, J = 8.9 Hz, 2H), 7.08 (s, 1H), 7.04 (d, J = 8.3 Hz, 2H), 6.94 (d, J = 8.9 Hz, 2H), 6.65 (d, J = 8.3 Hz, 2H), 6.35 (tt, J = 56.7, 4.1 Hz, 1H), 4.50 (td, J = 13.0, 4.1 Hz, 2H), 3.84 (s, 3H), 3.60 (br s, 2H), 3.01-2.95 (m, 4H).

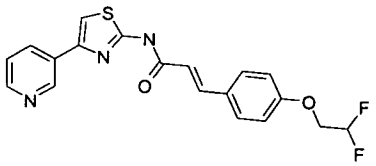
Example 217



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2,2-trifluoroethoxy)phenyl)-acrylamide (Compound 317)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.92 (s, 1H), 7.82 (d, J = 8.8 Hz, 2H), 7.69 (d, J = 15.6 Hz, 1H), 7.19 (d, J = 8.8 Hz, 2H), 7.12 (s, 1H), 6.91 (d, J = 8.8 Hz, 2H), 6.88 (d, J = 8.8 Hz, 2H), 6.17 (d, J = 15.6 Hz, 1H), 4.38 (q, J = 8.1 Hz, 2H), 3.75 (s, 3H).

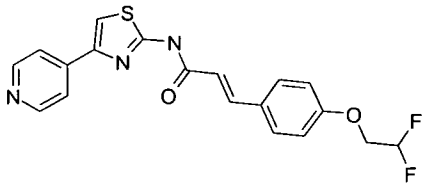
Example 218



N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 318)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.59 (s, 1H), 9.23 (s, 1H), 8.70 (m, 1H), 8.59 (m, 1H), 8.02 (s, 1H), 7.80 (m, 1H), 7.73 (d, J = 15.9 Hz, 1H), 7.63 (d, J = 8.8 Hz, 2H), 7.12 (d, J = 8.8 Hz, 2H), 6.85 (d, J = 15.9 Hz, 1H), 6.42 (tt, J = 54.2, 3.5 Hz, 1H), 4.40 (td, J = 14.6, 3.5 Hz, 2H).

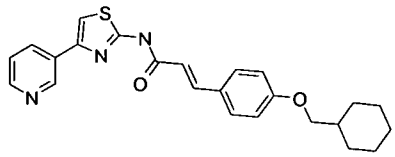
Example 219



N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 319)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.69 (s, 1H), 8.87 (m, 2H), 8.46 (s, 1H), 8.31 (d, J = 5.9 Hz, 2H), 7.75 (d, J = 15.9 Hz, 1H), 7.64 (d, J = 8.8 Hz, 2H), 7.12 (d, J = 8.8 Hz, 2H), 6.86 (d, J = 15.9 Hz, 1H), 6.42 (tt, J = 54.1, 3.4 Hz, 1H), 4.40 (tt, J = 14.7, 3.4 Hz, 2H).

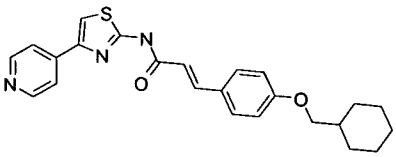
Example 220



N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 320)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.95 (br s, 1H), 9.51 (m, 1H), 8.61 (m, 1H), 8.14 (d, J = 8.1 Hz, 1H), 7.85 (d, J = 15.4 Hz, 1H), 7.52 (d, J = 8.8 Hz, 2H), 7.41 (m, 1H), 7.29 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.58 (d, J = 15.4 Hz, 1H), 3.81 (d, J = 6.3 Hz, 2H), 1.91-1.69 (m, 6H), 1.36-1.19 (m, 3H), 1.07 (m, 2H).

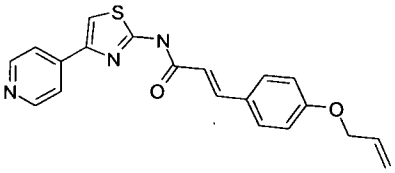
Example 221



N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 321)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.40 (br s, 1H), 8.67 (m, 2H), 7.82 (d, J = 15.5 Hz, 1H), 7.72 (d, J = 4.9 Hz, 2H), 7.45 (d, J = 8.8 Hz, 2H), 7.41 (s, 1H), 6.90 (d, J = 8.8 Hz, 2H), 6.42 (d, J = 15.5 Hz, 1H), 3.79 (d, J = 6.3 Hz, 2H), 1.90-1.68 (m, 6H), 1.36-1.16 (m, 3H), 1.07 (m, 2H).

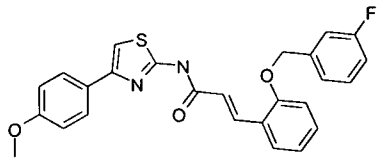
Example 222



N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 322)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.29 (s, 1H), 8.67 (m, 2H), 7.82 (d, J = 15.5 Hz, 1H), 7.72 (d, J = 4.8 Hz, 2H), 7.47 (d, J = 8.8 Hz, 2H), 7.41 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.43 (d, J = 15.5 Hz, 1H), 6.06 (m, 1H), 5.44 (dd, J = 17.3, 1.5 Hz, 1H), 5.33 (dd, J = 10.5, 1.5 Hz, 1H), 4.59 (dt, J = 5.4, 1.5 Hz, 2H).

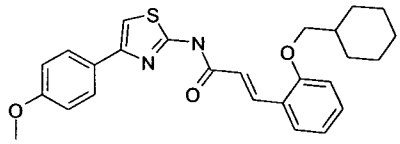
Example 223



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 323)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.90 (s, 1H), 8.11 (d, J = 15.6 Hz, 1H), 7.79 (d, J = 8.9 Hz, 2H), 7.32 (m, 1H), 7.25 (m, 1H), 7.14 (m, 1H), 7.09 (s, 1H), 7.06 (m, 1H), 6.99 (m, 1H), 6.85 (d, J = 8.9 Hz, 2H), 6.84-6.77 (m, 3H), 6.20 (d, J = 15.6 Hz, 1H), 5.06 (s, 2H), 3.68 (s, 3H).

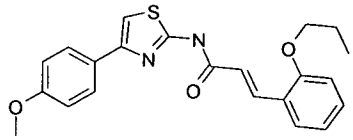
Example 224



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-cyclohexymethoxyphenyl)-acrylamide (Compound 324)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.78 (s, 1H), 8.06 (d, J = 15.6 Hz, 1H), 7.79 (d, J = 8.9 Hz, 2H), 7.27 (m, 1H), 7.10 (s, 1H), 6.86 (d, J = 8.9 Hz, 2H), 6.81 (d, J = 8.3 Hz, 1H), 6.78-6.76 (m, 2H), 6.19 (d, J = 15.6 Hz, 1H), 3.73 (d, J = 6.3 Hz, 2H), 3.70 (s, 3H), 1.88-1.65 (m, 6H), 1.33-1.23 (m, 2H), 1.19 (m, 1H), 1.01 (m, 2H).

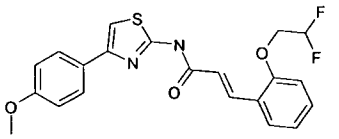
Example 225



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-propyloxyphenyl)acrylamide (Compound 325)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.69 (s, 1H), 8.08 (d, J = 15.6 Hz, 1H), 7.80 (d, J = 8.9 Hz, 2H), 7.27 (m, 1H), 7.10 (s, 1H), 6.87 (d, J = 8.9 Hz, 2H), 6.84-6.76 (m, 3H), 6.23 (d, J = 15.6 Hz, 1H), 3.92 (t, J = 6.5 Hz, 2H), 3.70 (s, 3H), 1.80 (m, 2H), 1.03 (t, J = 7.4 Hz, 3H).

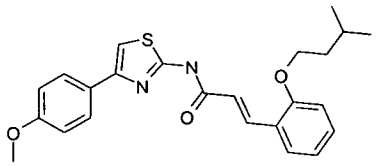
Example 226



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 326)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.87 (s, 1H), 8.02 (d, J = 15.9 Hz, 1H), 7.80 (d, J = 8.8 Hz, 2H), 7.31 (m, 1H), 7.12 (s, 1H), 6.88 (m, 1H), 6.86 (d, J = 8.8 Hz, 2H), 6.83-6.78 (m, 2H), 6.19 (d, J = 15.9 Hz, 1H), 6.10 (tt, J = 54.8, 4.1 Hz, 1H), 4.18 (td, J = 12.8, 4.1 Hz, 2H), 3.71 (s, 3H).

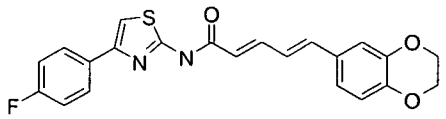
Example 227



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-methylbutyloxy)-phenyl)acrylamide (Compound 327)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 11.44 (s, 1H), 8.06 (d, J = 15.8 Hz, 1H), 7.79 (d, J = 8.8 Hz, 2H), 7.29 (m, 1H), 7.10 (s, 1H), 6.87 (d, J = 8.8 Hz, 2H), 6.86-6.78 (m, 3H), 6.26 (d, J = 15.8 Hz, 1H), 3.99 (t, J = 6.8 Hz, 2H), 3.71 (s, 3H), 1.82 (sept, J = 6.8 Hz, 1H), 1.69 (q, J = 6.8 Hz, 2H), 0.95 (d, J = 6.8 Hz, 6H).

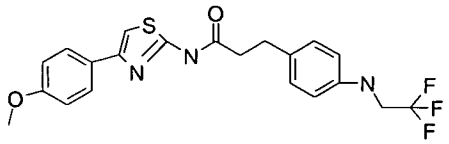
Example 228



N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 328)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.45 (s, 1H), 7.95 (dd, J = 8.9, 5.5 Hz, 2H), 7.63 (s, 1H), 7.46 (ddd, J = 15.3, 9.0, 1.4 Hz, 1H), 7.27 (t, J = 8.9 Hz, 2H), 7.17 (d, J = 2.0 Hz, 1H), 7.11 (dd, J = 8.4, 2.0 Hz, 1H), 7.04 (dd, J = 15.3, 9.0 Hz, 1H), 6.99 (dd, J = 15.3, 1.4 Hz, 1H), 6.87 (d, J = 8.4 Hz, 1H), 6.40 (d, J = 15.3 Hz, 1H), 4.29-4.24 (m, 4H).

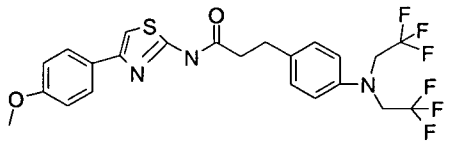
Example 229



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2,2,2-trifluoroethylamino)-phenyl)propionamide (Compound 329)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.49 (s, 1H), 7.71 (d, J = 8.8 Hz, 2H), 7.00 (d, J = 8.5 Hz, 2H), 6.99 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.61 (d, J = 8.5 Hz, 2H), 3.87 (t, J = 7.0 Hz, 1H), 3.84 (s, 3H), 3.73 (qd, J = 8.9, 7.0 Hz, 2H), 2.93 (t, J = 7.6 Hz, 2H), 2.61 (t, J = 7.6 Hz, 2H).

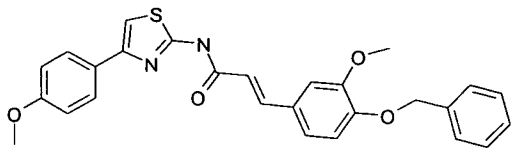
Example 230



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2,2-trifluoroethyl)amino-phenyl)propionamide (Compound 330)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.70 (d, J = 8.8 Hz, 2H), 7.09 (d, J = 8.8 Hz, 2H), 6.98 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.83 (d, J = 8.8 Hz, 2H), 4.01 (q, J = 8.6 Hz, 4H), 3.84 (s, 3H), 2.97 (t, J = 7.7 Hz, 2H), 2.67 (t, J = 7.7 Hz, 2H).

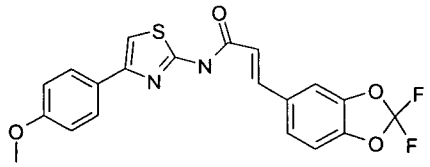
Example 231



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-benzyloxyphenyl)-acrylamide (Compound 331)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.39 (s, 1H), 7.76 (d, J = 8.8 Hz, 2H), 7.69 (d, J = 15.5 Hz, 1H), 7.44 (m, 2H), 7.39 (t, J = 7.3 Hz, 2H), 7.33 (t, J = 7.3 Hz, 1H), 7.07 (s, 1H), 6.90 (d, J = 1.7 Hz, 1H), 6.87 (d, J = 8.8 Hz, 2H), 6.86 (dd, J = 8.2, 1.7 Hz, 1H), 6.83 (d, J = 8.2 Hz, 1H), 6.21 (d, J = 15.5 Hz, 1H), 5.20 (s, 2H), 3.90 (s, 3H), 3.74 (s, 3H).

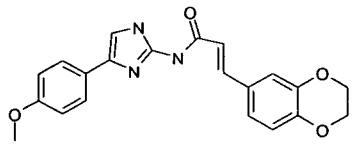
Example 232



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 332)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.54 (s, 1H), 7.85 (d, J = 8.9 Hz, 2H), 7.76 (d, J = 15.9 Hz, 1H), 7.71 (d, J = 1.2 Hz, 1H), 7.54 (dd, J = 8.2, 1.2 Hz, 1H), 7.52 (d, J = 8.2 Hz, 1H), 7.51 (s, 1H), 7.00 (d, J = 8.9 Hz, 2H), 6.90 (d, J = 15.9 Hz, 1H), 3.80 (s, 3H).

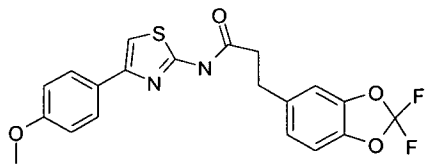
Example 233



N-[4-(4-Methoxyphenyl)imidazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 333)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.87 (d, J = 15.4 Hz, 1H), 7.68 (d, J = 8.5 Hz, 2H), 7.19 (d, J = 2.0 Hz, 1H), 7.17 (dd, J = 8.5, 2.0 Hz, 1H), 7.15 (s, 1H), 6.93 (d, J = 8.5 Hz, 1H), 6.92 (d, J = 8.5 Hz, 2H), 6.90 (d, J = 15.4 Hz, 1H), 6.21 (br s, 1H), 4.35-4.30 (m, 4H), 3.84 (s, 3H).

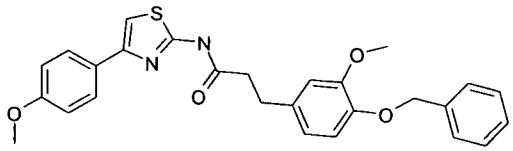
Example 234



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(2,2-difluoro-1,3-benzodioxol-5-yl)-propionamide (Compound 334)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 1.83 (s, 1H), 7.60 (d, J = 8.5 Hz, 2H), 6.93 (s, 1H), 6.84 (d, J = 8.5 Hz, 2H), 6.80 (d, J = 8.2 Hz, 1H), 6.55 (d, J = 8.2 Hz, 1H), 6.51 (s, 1H), 3.75 (s, 3H), 2.74 (t, J = 7.6 Hz, 2H), 2.22 (t, J = 7.6 Hz, 2H).

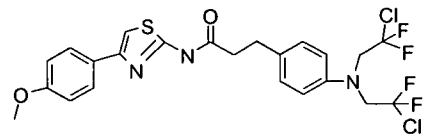
Example 235



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-benzyloxyphenyl)-propionamide (Compound 335)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.81 (s, 1H), 7.69 (d, J = 9.0 Hz, 2H), 7.43 (m, 2H), 7.35 (t, J = 7.4 Hz, 2H), 7.29 (tt, J = 7.4, 1.3 Hz, 1H), 6.98 (s, 1H), 6.89 (d, J = 9.0 Hz, 2H), 6.76 (d, J = 8.1 Hz, 1H), 6.65 (d, J = 2.0 Hz, 1H), 6.52 (dd, J = 8.1, 2.0 Hz, 1H), 5.12 (s, 2H), 3.82 (s, 6H), 2.89 (t, J = 7.7 Hz, 2H), 2.51 (t, J = 7.7 Hz, 2H).

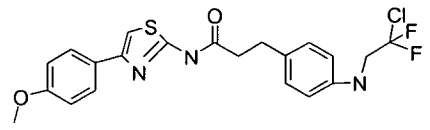
Example 236



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2-chloro-2,2-difluoroethyl)-aminophenyl)propionamide (Compound 336)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 7.69 (d, J = 8.8 Hz, 2H), 7.08 (d, J = 8.8 Hz, 2H), 6.98 (s, 1H), 6.94 (d, J = 8.8 Hz, 2H), 6.88 (d, J = 8.8 Hz, 2H), 4.21 (t, J = 11.9 Hz, 4H), 3.84 (s, 3H), 2.96 (t, J = 7.7 Hz, 2H), 2.67 (t, J = 7.7 Hz, 2H).

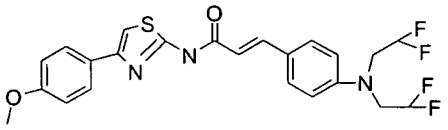
Example 237



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloro-2,2-difluoroethyl)-aminophenyl)propionamide (Compound 337)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 7.71 (d, J = 8.9 Hz, 2H), 7.01 (d, J = 8.5 Hz, 2H), 6.99 (s, 1H), 6.93 (d, J = 8.9 Hz, 2H), 6.63 (d, J = 8.5 Hz, 2H), 3.87 (t, J = 11.7 Hz, 2H), 3.83 (s, 3H), 2.94 (t, J = 7.6 Hz, 2H), 2.65 (t, J = 7.6 Hz, 2H).

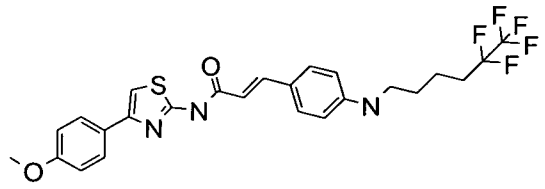
Example 238



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)acrylamide (Compound 338)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.77 (d, J = 8.5 Hz, 2H), 7.75 (d, J = 15.3 Hz, 1H), 7.40 (d, J = 8.5 Hz, 2H), 7.05 (s, 1H), 6.94 (d, J = 8.5 Hz, 2H), 6.78 (d, J = 8.5 Hz, 2H), 6.31 (d, J = 15.3 Hz, 1H), 5.98 (tt, J = 55.3, 4.0 Hz, 2H), 3.86 (td, J = 13.7, 4.0 Hz, 4H), 3.82 (s, 3H).

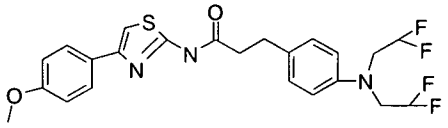
Example 239



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(5,5,6,6,6-pentafluorohexyl)-aminophenyl)acrylamide (Compound 339)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 10.49 (s, 1H), 7.80 (d, J = 8.8 Hz, 2H), 7.68 (d, J = 15.4 Hz, 1H), 7.17 (d, J = 8.8 Hz, 2H), 7.06 (s, 1H), 6.92 (d, J = 8.8 Hz, 2H), 6.52 (d, J = 8.8 Hz, 2H), 6.12 (d, J = 15.4 Hz, 1H), 3.78 (s, 3H), 3.22 (m, 2H), 2.08 (m, 2H), 1.75-1.71 (m, 4H).

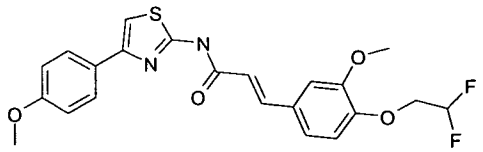
Example 240



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)propionamide (Compound 340)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.69 (d, J = 8.8 Hz, 2H), 7.09 (d, J = 8.8 Hz, 2H), 6.98 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.71 (d, J = 8.8 Hz, 2H), 5.92 (tt, J = 55.8, 4.2 Hz, 2H), 3.84 (s, 3H), 3.75 (td, J = 13.8, 4.2 Hz, 4H), 2.97 (t, J = 7.7 Hz, 2H), 2.67 (t, J = 7.7 Hz, 2H).

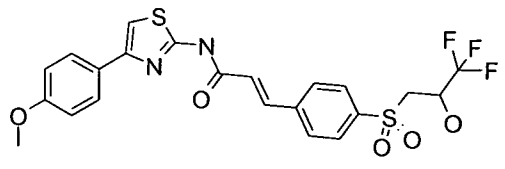
Example 241



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(2,2-difluoroethoxy)-phenyl)acrylamide (Compound 341)

This compound was prepared as described in Scheme III. ^{1}H NMR (300MHz, $CDCl_3$) 10.66 (s, 1H), 7.78 (d, J = 8.8 Hz, 2H), 7.69 (d, J = 15.5 Hz, 1H), 7.10 (s, 1H), 6.92-6.84 (m, 5H), 6.22 (d, J = 15.5 Hz, 1H), 6.15 (tt, J = 54.9, 4.0 Hz, 1H), 4.26 (td, J = 13.0, 4.0 Hz, 2H), 3.87 (s, 3H), 3.76 (s, 3H).

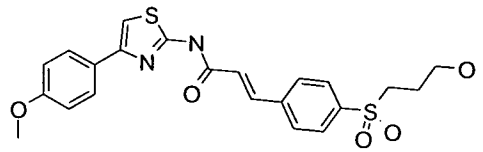
Example 242



(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoropropyl)-sulfonylphenyl)acrylamide (Compound 342)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.97 (d, J = 8.6 Hz, 2H), 7.85 (d, J = 15.6 Hz, 1H), 7.76 (d, J = 8.7 Hz, 2H), 7.75 (d, J = 8.6 Hz, 2H), 7.07 (s, 1H), 6.97 (d, J = 8.7 Hz, 2H), 6.85 (d, J = 15.6 Hz, 1H), 4.56 (m, 1H), 3.86 (s, 3H), 3.51 (dd, J = 14.7, 10.0 Hz, 1H), 3.40 (dd, J = 14.7, 1.8 Hz, 1H).

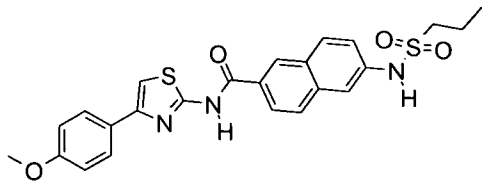
Example 243



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyl)sulfonylphenyl)-acrylamide (Compound 343)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.83 (d, J = 8.9 Hz, 2H), 7.79 (d, J = 8.4 Hz, 2H), 7.69 (d, J = 15.5 Hz, 1H), 7.21 (s, 1H), 7.17 (d, J = 8.4 Hz, 2H), 6.88 (d, J = 8.9 Hz, 2H), 6.26 (d, J = 15.5 Hz, 1H), 3.76 (t, J = 6.0 Hz, 2H), 3.69 (s, 3H), 3.26 (m, 2H), 1.99 (m, 2H).

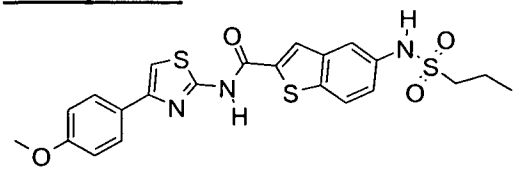
Example 244



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-propylsulfonylamino-6-naphthamide (Compound 344)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 8.76 (d, J = 1.6 Hz, 1H), 8.11 (dd, J = 8.8, 1.6 Hz, 1H), 8.05 (d, J = 8.8 Hz, 1H), 7.96 (d, J = 8.8 Hz, 1H), 7.91 (d, J = 8.8 Hz, 2H), 7.74 (d, J = 2.1 Hz, 1H), 7.54 (s, 1H), 7.50 (dd, J = 8.8, 2.1 Hz, 1H), 7.02 (d, J = 8.8 Hz, 2H), 3.81 (s, 3H), 3.21 (t, J = 7.5 Hz, 2H), 1.72 (sext, J = 7.5 Hz, 2H), 0.94 (t, J = 7.5 Hz, 3H).

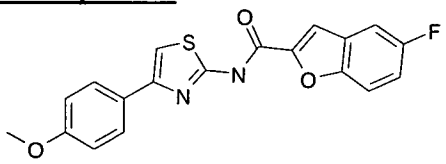
Example 245



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 345)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 13.09 (br s, 1H), 9.95 (br s, 1H), 8.53 (br s, 1H), 8.04 (d, J = 8.8 Hz, 1H), 7.89 (d, J = 8.8 Hz, 2H), 7.78 (d, J = 2.0 Hz, 1H), 7.55 (s, 1H), 7.39 (dd, J = 8.8, 2.0 Hz, 1H), 7.02 (d, J = 8.8 Hz, 2H), 3.80 (s, 3H), 3.11 (t, J = 7.6 Hz, 2H), 1.71 (sext, J = 7.6 Hz, 2H), 0.94 (t, J = 7.6 Hz, 3H).

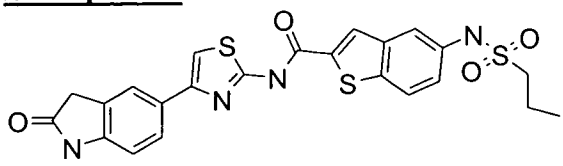
Example 246



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-fluoro-2-benzofuranamide (Compound 346)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 13.10 (s, 1H), 8.10 (s, 1H), 7.90 (d, J = 8.4 Hz, 2H), 7.80 (dd, J = 9.2, 4.0 Hz, 1H), 7.72 (dd, J = 8.5, 2.2 Hz, 1H), 7.58 (s, 1H), 7.40 (td, J = 9.2, 2.2 Hz, 1H), 7.02 (d, J = 8.4 Hz, 2H), 3.81 (s, 3H).

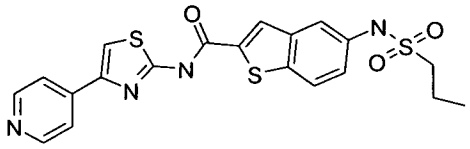
Example 247



N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 347)

This compound was prepared as described in Scheme II. ^{1}H NMR (500 MHz, DMSO) 13.09 (s, 1H), 10.51 (s, 1H), 9.96 (s, 1H), 8.54 (s, 1H), 8.05 (d, J = 8.7 Hz, 1H), 7.82-7.76 (m, 3H), 7.55 (s, 1H), 7.39 (dd, J = 8.7, 2.1 Hz, 1H), 6.89 (d, J = 8.7 Hz, 1H), 3.56 (s, 2H), 3.11 (t, J = 7.5 Hz, 2H), 1.71 (sext, J = 7.5 Hz, 2H), 0.94 (t, J = 7.5 Hz, 3H).

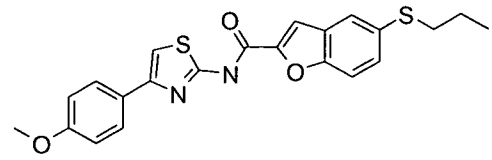
Example 248



N-[4-(4-Pyridyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 348)

This compound was prepared as described in Scheme II. ^{1}H NMR (500 MHz, DMSO) 13.24 (s, 1H), 9.97 (s, 1H), 8.67-8.64 (m, 2H), 8.56 (br s, 1H), 8.10 (br s, 1H), 8.05 (d, J = 8.8 Hz, 1H), 7.92-7.89 (m, 2H), 7.79 (d, J = 2.2 Hz, 1H), 7.40 (dd, J = 8.8, 2.2 Hz, 1H), 3.11 (t, J = 7.6 Hz, 2H), 1.71 (sext, J = 7.6 Hz, 2H), 0.94 (t, J = 7.6 Hz, 3H).

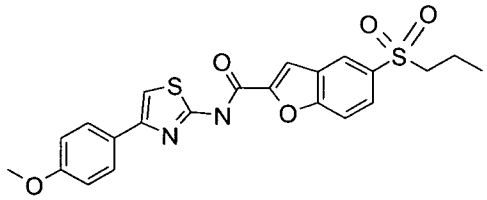
Example 249



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylthio-2-benzofuranamide (Compound 349)

This compound was prepared as described in Scheme I. ^{1}H NMR (300MHz, DMSO) 13.06 (s, 1H), 8.05 (s, 1H), 7.89 (d, J = 8.7 Hz, 2H), 7.85 (d, J = 1.7 Hz, 1H), 7.70 (d, J = 8.7 Hz, 1H), 7.57 (s, 1H), 7.50 (dd, J = 8.7, 1.7 Hz, 1H), 7.02 (d, J = 8.7 Hz, 2H), 3.80 (s, 3H), 2.99 (t, J = 7.2 Hz, 2H), 1.59 (sext, J = 7.2 Hz, 2H), 0.99 (t, J = 7.2 Hz, 3H).

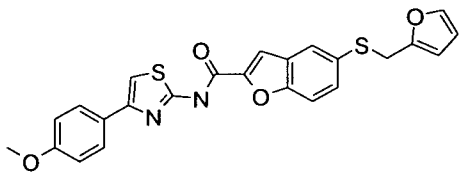
Example 250



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonyl-2-benzofuranamide (Compound 350)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, DMSO) 13.24 (s, 1H), 8.49 (m, 1H), 8.29 (s, 1H), 8.03 (d, J = 8.7 Hz, 1H), 8.01 (dd, J = 8.7, 1.7 Hz, 1H), 7.90 (d, J = 8.8 Hz, 2H), 7.59 (s, 1H), 7.02 (d, J = 8.8 Hz, 2H), 3.81 (s, 3H), 3.36 (m, 2H), 1.58 (sext, J = 7.5 Hz, 2H), 0.92 (t, J = 7.5 Hz, 3H).

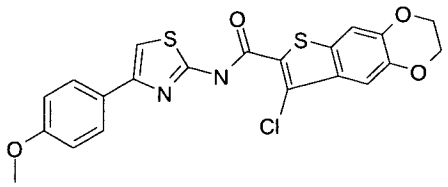
Example 251



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(2-furanyl)methylthio-2-benzofuranamide (Compound 351)

This compound was prepared as described in Scheme I. ^{1}H NMR (500 MHz, $CDCl_3$) 9.88 (s, 1H), 7.79 (d, J = 8.9 Hz, 2H), 7.72 (m, 1H), 7.62 (s, 1H), 7.50-7.46 (m, 2H), 7.36 (dd, J = 1.8, 0.8 Hz, 1H), 7.10 (s, 1H), 6.96 (d, J = 8.9 Hz, 2H), 6.26 (dd, J = 3.2, 1.8 Hz, 1H), 6.03 (dd, J = 3.2, 0.8 Hz, 1H), 4.10 (s, 2H), 3.86 (s, 3H).

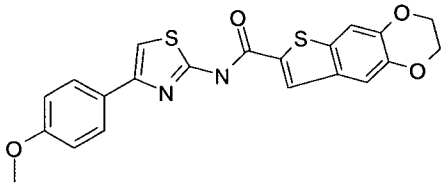
Example 252



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-5,6,7,8-tetrahydro-5,8-dioxathiopheno[2,3-b]naphthalene-2-amide (Compound 352)

This compound was prepared as described in Scheme I. ^{1}H NMR (300MHz, DMSO) 7.87 (d, J = 8.4 Hz, 2H), 7.67 (s, 1H), 7.54 (s, 1H), 7.33 (s, 1H), 7.01 (d, J = 8.4 Hz, 2H), 4.36 (s, 4H), 3.80 (s, 3H).

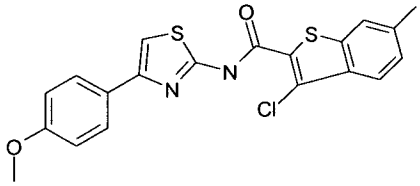
Example 253



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5,6,7,8-tetrahydro-5,8-dioxathiopheno[2,3-b]naphthalene-2-amide (Compound 353)

This compound was prepared as described in Scheme I. ^{1}H NMR (300MHz, $CDCl_3$) 10.29 (s, 1H), 7.82 (d, J = 8.8 Hz, 2H), 7.40 (s, 1H), 7.32 (s, 1H), 7.26 (s, 1H), 7.08 (s, 1H), 6.96 (d, J = 8.8 Hz, 2H), 4.36 (m, 4H), 3.86 (s, 3H).

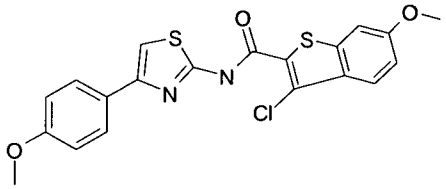
Example 254



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methyl-2-thiopheneamide (Compound 354)

This compound was prepared as described in Scheme I. ^{1}H NMR (300MHz, CDCl3) δ 7.84 (d, J = 8.1 Hz, 1H), 7.82 (d, J = 8.9 Hz, 2H), 7.69 (m, 1H), 7.37 (dd, J = 8.1, 1.4 Hz, 1H), 7.10 (s, 1H), 6.97 (d, J = 8.9 Hz, 2H), 3.86 (s, 3H), 2.54 (s, 3H).

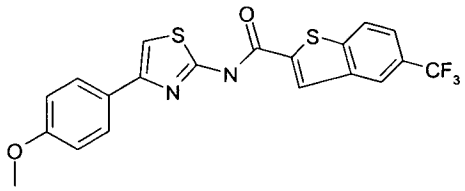
Example 255



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methoxy-2-thiopheneamide (Compound 355)

This compound was prepared as described in Scheme I. ^{1}H NMR (300MHz, $CDCl_3$) 10.31 (s, 1H), 7.82 (d, J = 8.7 Hz, 2H), 7.82 (d, J = 8.8 Hz, 1H), 7.30 (d, J = 2.1 Hz, 1H), 7.15 (dd, J = 8.8, 2.1 Hz, 1H), 7.09 (s, 1H), 6.96 (d, J = 8.7 Hz, 2H), 3.93 (s, 3H), 3.86 (s, 3H).

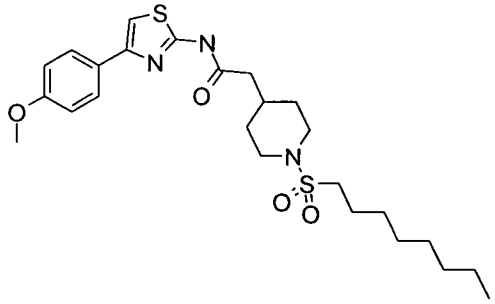
Example 256



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-trifluoromethyl-2-thiopheneamide (Compound 356)

This compound was prepared as described in Scheme I. ^{1}H NMR (300MHz, $CDCl_3$) 10.97 (s, 1H), 8.01 (m, 1H), 7.97 (d, J = 8.5 Hz, 1H), 7.82 (s, 1H), 7.67 (dd, J = 8.5, 1.5 Hz, 1H), 7.62 (d, J = 8.8 Hz, 2H), 7.11 (s, 1H), 6.77 (d, J = 8.8 Hz, 2H), 3.77 (s, 3H).

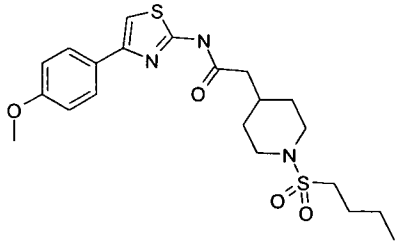
Example 257



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-octylsulfonyl)piperidinyl)acetamide (Compound 357)

This compound was prepared as described in Scheme IV. ^{1}H NMR (500 MHz, $CDCl_3$) 10.00 (s, 1H), 7.74 (d, J = 8.9 Hz, 2H), 7.02 (s, 1H), 6.96 (d, J = 8.9 Hz, 2H), 3.85 (s, 3H), 3.76 (m, 2H), 2.86 (t, J = 8.0 Hz, 2H), 2.71 (m, 2H), 2.15 (d, J = 7.0 Hz, 2H), 1.95 (m, 1H), 1.79 (m, 2H), 1.73 (m, 2H), 1.40 (m, 2H), 1.35-1.15 (m, 10H), 0.88 (t, J = 7.0 Hz, 3H).

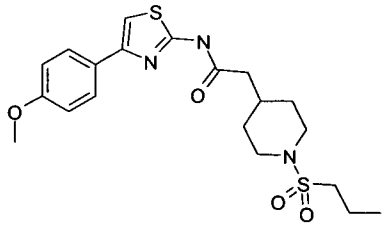
Example 258



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-butylsulfonyl)piperidinyl)acetamide (Compound 358)

This compound was prepared as described in Scheme IV. ^{1}H NMR (500 MHz, $CDCl_3$) 10.23 (br s, 1H), 7.74 (d, J = 8.9 Hz, 2H), 7.02 (s, 1H), 6.96 (d, J = 8.9 Hz, 2H), 3.85 (s, 3H), 3.75 (m, 2H), 2.87 (m, 2H), 2.70 (m, 2H), 2.11 (d, J = 7.0 Hz, 2H), 1.93 (m, 1H), 1.78 (qn, J = 7.5 Hz, 2H), 1.70 (m, 2H), 1.45 (sext, J = 7.5 Hz, 2H), 1.16 (m, 2H), 0.95 (t, J = 7.5 Hz, 3H).

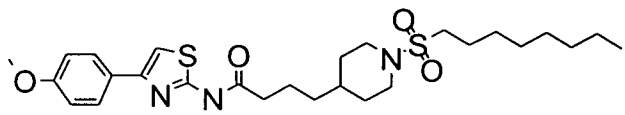
Example 259



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 359)

This compound was prepared as described in Scheme IV. ^{1}H NMR (500 MHz, $CDCl_3$) 10.64 (br s, 1H), 7.74 (d, J = 8.9 Hz, 2H), 7.02 (s, 1H), 6.96 (d, J = 8.9 Hz, 2H), 3.85 (s, 3H), 3.72 (m, 2H), 2.84 (m, 2H), 2.67 (m, 2H), 2.02 (d, J = 7.1 Hz, 2H), 1.89 (m, 1H), 1.83 (sext, J = 7.4 Hz, 2H), 1.65 (m, 2H), 1.09 (m, 2H), 1.06 (t, J = 7.4 Hz, 3H).

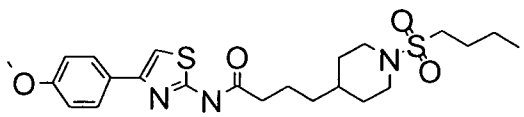
Example 260



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-octylsulfonyl)piperidinyl)butamide (Compound 360)

This compound was prepared as described in Scheme IV. ^{1}H NMR (300MHz, Acetone) 11.01 (s, 1H), 7.84 (d, J = 8.9 Hz, 2H), 7.28 (s, 1H), 6.96 (d, J = 8.9 Hz, 2H), 3.82 (s, 3H), 3.71 (m, 2H), 2.94 (m, 2H), 2.80 (m, 2H), 2.60 (t, J = 7.4 Hz, 2H), 1.87-1.57 (m, 6H), 1.50-1.12 (m, 13H), 0.88 (t, J = 6.8 Hz, 3H).

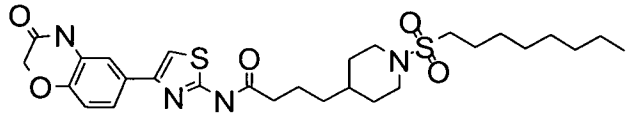
Example 261



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-butylsulfonyl)piperidinyl)butamide (Compound 361)

This compound was prepared as described in Scheme IV. ^{1}H NMR (300MHz, Acetone) 11.00 (s, 1H), 7.84 (d, J = 9.0 Hz, 2H), 7.28 (s, 1H), 6.96 (d, J = 9.0 Hz, 2H), 3.82 (s, 3H), 3.71 (m, 2H), 2.95 (m, 2H), 2.80 (m, 2H), 2.60 (t, J = 7.4 Hz, 2H), 1.87-1.67 (m, 6H), 1.52-1.33 (m, 5H), 1.28-1.14 (m, 2H), 0.93 (t, J = 7.3 Hz, 3H).

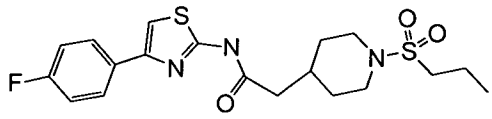
Example 262



N-[4-(2,3-Dihydro-2-oxo-1,4-benzoxazin-7-yl)thiazol-2-yl]-4-(4-(4-octylsulfonyl)piperidinyl)butamide (Compound 362)

This compound was prepared as described in Scheme IV. ^{1}H NMR (300MHz, Acetone) 11.04 (s, 1H), 9.64 (s, 1H), 7.52 (d, J = 2.0 Hz, 1H), 7.50 (dd, J = 8.1, 2.0 Hz, 1H), 7.29 (s, 1H), 6.97 (d, J = 8.1 Hz, 1H), 4.59 (s, 2H), 3.71 (m, 2H), 2.97 (m, 2H), 2.80 (m, 2H), 2.60 (t, J = 7.4 Hz, 2H), 1.87-1.69 (m, 6H), 1.50-1.13 (m, 13H), 0.88 (t, J = 6.7 Hz, 3H).

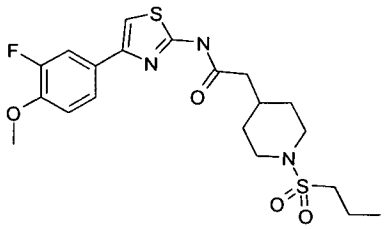
Example 263



N-[4-(4-Fluorophenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 363)

This compound was prepared as described in Scheme IV. ^{1}H NMR (500 MHz, $CDCl_3$) 10.21 (br s, 1H), 7.79 (dd, J = 8.7, 5.4 Hz, 2H), 7.12 (t, J = 8.7 Hz, 2H), 7.10 (s, 1H), 3.75 (m, 2H), 2.86 (m, 2H), 2.71 (m, 2H), 2.14 (d, J = 7.1 Hz, 2H), 1.95 (m, 1H), 1.84 (sext, J = 7.5 Hz, 2H), 1.72 (m, 2H), 1.19 (m, 2H), 1.06 (t, J = 7.5 Hz, 3H).

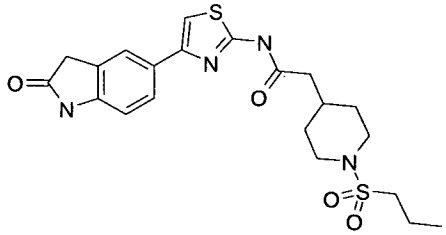
Example 264



N-[4-(4-Fluoro-4-methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)acetamide (Compound 364)

This compound was prepared as described in Scheme IV. ^{1}H NMR (500 MHz, $CDCl_3$) 10.40 (s, 1H), 7.55 (dd, J = 14.2, 2.0 Hz, 1H), 7.53 (ddd, J = 8.4, 2.0, 0.9 Hz, 1H), 7.05 (s, 1H), 7.01 (t, J = 8.4 Hz, 1H), 3.93 (s, 3H), 3.75 (m, 2H), 2.86 (m, 2H), 2.70 (m, 2H), 2.13 (d, J = 7.1 Hz, 2H), 1.94 (m, 1H), 1.84 (sext, J = 7.6 Hz, 2H), 1.73-1.67 (m, 2H), 1.16 (m, 2H), 1.06 (t, J = 7.6 Hz, 3H).

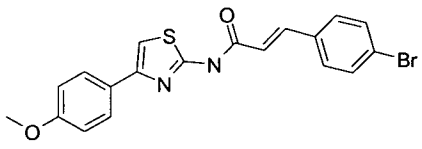
Example 265



N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)acetamide (Compound 365)

This compound was prepared as described in Scheme IV. ^{1}H NMR (500 MHz, DMSO) 12.22 (s, 1H), 10.48 (s, 1H), 7.74-7.71 (m, 2H), 7.42 (s, 1H), 6.85 (d, J = 8.5 Hz, 1H), 3.59-3.52 (m, 4H), 2.98 (m, 2H), 2.82-2.75 (m, 2H), 2.45-2.41 (m, 2H), 1.92 (m, 1H), 1.77-1.64 (m, 4H), 1.22 (m, 2H), 0.98 (t, J = 7.4 Hz, 3H).

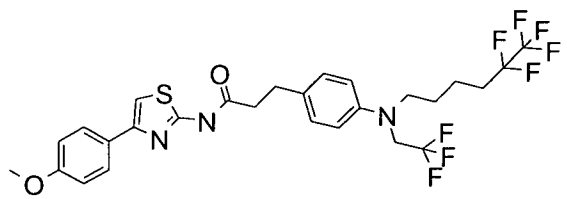
Example 266



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-bromophenyl)acrylamide (Compound 366)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.79 (d, J = 8.9 Hz, 2H), 7.68 (d, J = 15.6 Hz, 1H), 7.46 (d, J = 8.4 Hz, 2H), 7.11 (s, 1H), 7.11 (d, J = 8.4 Hz, 2H), 6.92 (d, J = 8.9 Hz, 2H), 6.28 (d, J = 15.6 Hz, 1H), 3.77 (s, 3H).

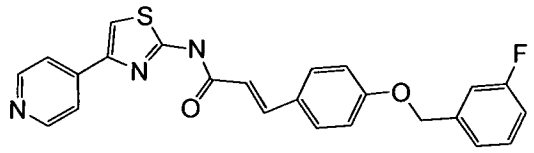
Example 267



N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N-2,2,2-trifluoroethyl-N-5,5,6,6,6-pentafluorohexylaminophenyl)propionamide (Compound 367)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.71 (d, J = 8.8 Hz, 2H), 7.11 (d, J = 8.8 Hz, 2H), 6.99 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.72 (d, J = 8.8 Hz, 2H), 3.84 (s, 3H), 3.83 (q, J = 8.9 Hz, 2H), 3.39 (t, J = 7.3 Hz, 2H), 2.99 (t, J = 7.6 Hz, 2H), 2.71 (t, J = 7.6 Hz, 2H), 2.09-1.98 (m, 2H), 1.72-1.62 (m, 4H).

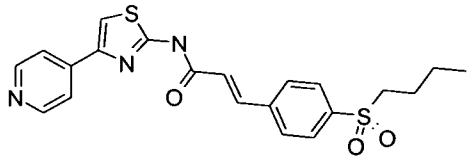
Example 268



N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)acrylamide (Compound 368)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 8.60 (d, J = 5.2 Hz, 2H), 8.06 (br s, 1H), 7.82 (d, J = 15.6 Hz, 1H), 7.77 (d, J = 5.2 Hz, 2H), 7.56 (d, J = 8.8 Hz, 2H), 7.45 (s, 1H), 7.38 (td, J = 7.9, 5.9 Hz, 1H), 7.21 (m, 1H), 7.17 (m, 1H), 7.04 (m, 1H), 7.00 (d, J = 8.8 Hz, 2H), 6.61 (d, J = 15.6 Hz, 1H), 5.12 (s, 2H).

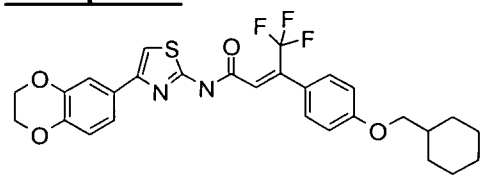
Example 269



N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 369)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.88 (s, 1H), 8.88 (d, J = 6.5 Hz, 2H), 8.49 (s, 1H), 8.31 (d, J = 6.5 Hz, 2H), 7.99 (d, J = 8.3 Hz, 2H), 7.92 (d, J = 8.3 Hz, 2H), 7.87 (d, J = 15.9 Hz, 1H), 7.13 (d, J = 15.9 Hz, 1H), 3.35 (m, 2H), 1.52 (m, 2H), 1.34 (m, 2H), 0.84 (t, J = 7.4 Hz, 3H).

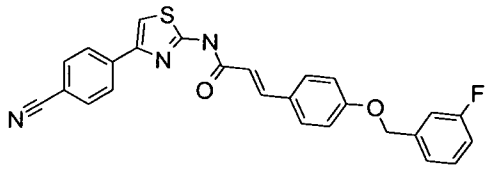
Example 270



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-trifluoromethyl-3-(4-cyclohexyl-methoxyphenyl)acrylamide (Compound 370)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.71 (s, 1H), 7.51 (s, 1H), 7.37 (d, J = 2.0 Hz, 1H), 7.36 (dd, J = 8.1, 2.0 Hz, 1H), 7.25 (d, J = 8.8 Hz, 2H), 7.07 (m, 1H), 6.96 (d, J = 8.8 Hz, 2H), 6.89 (d, J = 8.1 Hz, 1H), 4.26 (s, 4H), 3.80 (d, J = 6.3 Hz, 2H), 1.81 (m, 2H), 1.77-1.68 (m, 3H), 1.65 (m, 1H), 1.30-1.12 (m, 3H), 1.04 (m, 2H).

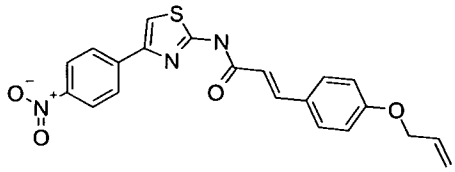
Example 271



N-[4-(4-Cyanophenyl)thiazol-2-yl]-3(E)-(4-(3-fluoro)-benzyloxyphenyl)acrylamide (Compound 371)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 7.93 (d, J = 8.8 Hz, 2H), 7.82 (d, J = 15.5 Hz, 1H), 7.71 (d, J = 8.8 Hz, 2H), 7.54 (d, J = 8.8 Hz, 2H), 7.37 (m, 1H), 7.32 (s, 1H), 7.21 (m, 1H), 7.16 (m, 1H), 7.04 (m, 1H), 7.00 (d, J = 8.8 Hz, 2H), 6.56 (d, J = 15.5 Hz, 1H), 5.12 (s, 2H).

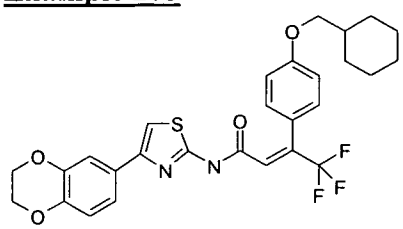
Example 272



N-[4-(4-Nitrophenyl)thiazol-2-yl]-3(E)-(1-allyloxyphenyl)acrylamide (Compound 372)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, $CDCl_3$) 9.32 (s, 1H), 8.27 (d, J = 8.8 Hz, 2H), 8.00 (d, J = 8.8 Hz, 2H), 7.81 (d, J = 15.6 Hz, 1H), 7.45 (d, J = 8.8 Hz, 2H), 7.40 (s, 1H), 6.93 (d, J = 8.8 Hz, 2H), 6.37 (d, J = 15.6 Hz, 1H), 6.06 (ddt, J = 17.2, 10.5, 5.2 Hz, 1H), 5.44 (dq, J = 17.2, 1.5 Hz, 1H), 5.33 (dq, J = 10.5, 1.5 Hz, 1H), 4.60 (dt, J = 5.2, 1.5 Hz, 2H).

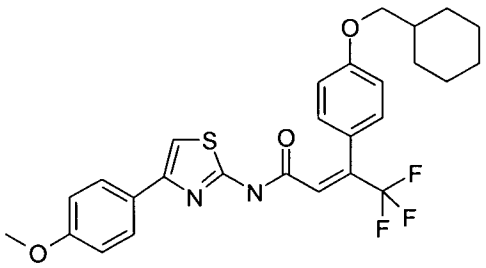
Example 273



N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexyl-methoxyphenyl)acrylamide (Compound 373)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.73 (s, 1H), 7.56 (s, 1H), 7.42 (d, J = 8.7 Hz, 2H), 7.40 (d, J = 2.0 Hz, 1H), 7.38 (dd, J = 8.3, 2.0 Hz, 1H), 7.05 (d, J = 8.7 Hz, 2H), 6.95 (s, 1H), 6.91 (d, J = 8.3 Hz, 1H), 4.27 (s, 4H), 3.84 (d, J = 6.3 Hz, 2H), 1.85-1.63 (m, 6H), 1.31-1.13 (m, 3H), 1.05 (m, 2H).

Example 274



N-[4-Methoxyphenyl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexylmethoxyphenyl)acrylamide (Compound 374)

This compound was prepared as described in Scheme III. ^{1}H NMR (500 MHz, DMSO) 12.75 (s, 1H), 7.84 (d, J = 8.8 Hz, 2H), 7.55 (s, 1H), 7.42 (d, J = 8.8 Hz, 2H), 7.05 (d, J = 8.8 Hz, 2H), 7.00 (d, J = 8.8 Hz, 2H), 6.95 (s, 1H), 3.84 (d, J = 6.3 Hz, 2H), 3.79 (s, 3H), 1.85-1.79 (m, 2H), 1.78-1.69 (m, 3H), 1.66 (m, 1H), 1.31-1.13 (m, 3H), 1.05 (m, 2H).

Example 275

AR Functional Screening Assay:

The prepared compounds were screened in an AR functional assay to measure their maximum inhibition of the dihydrotestosterone (DHT) induced transcriptional activity (*e.g.*, see Wong *et al.*, J Biol Chem 270(34): 19998-20003 (1995); Evans *et al.*, Science, 240:889-95 (1988); and U.S. Patent Nos. 4,981,784 and 5,071,773, the disclosure of each of which is incorporated by reference herein) and the results are summarized in Table 1.

Transcriptional activity was assessed by transient transfection of human mammary cancer MDA-MB-453 cells, containing endogenous AR, with a mouse mammary tumor virus luciferase reporter vector using a non-liposomal formulation, the FuGene6 transfection reagent (Roche, Indianapolis, IN), according to manufacturer's specifications. Twenty-four hours after transfection, DHT and 10 mM of the selected non-steroidal compound provided herein were added with fresh

medium and 20 hours after the last addition, cells were harvested in lysis buffer. Relative light measurements using a 0.1 mL aliquot were determined using a Torcon Prospector luminometer (Torcon Instrumentation, Torrance, CA).

In the table, the expression "Efficacy (%) at 10 mM" means that the transcriptional activity induced by dihydrotestosterone (DHT) is inhibited by the substance of the present invention at the given concentration in the androgen receptor reporter gene assay.

Antagonist efficacy (%)=(transcriptional activity exhibited after contact with the selected non-steroidal compound provided herein at 10 mM)/(the maximum transcriptional activity induced by DHT)×100.

Table 1. Androgen Receptor Antagonist Activity Data

Compound Number	Example	Efficacy (%) at 10 μM	Compound Number	Example	Efficacy (%) at 10 μM
101	1	87	102	2	79
103	3	99	104	4	87
105	5	89	106	6	81
107	7	94	108	8	97
109	9	95	110	10	97
111	11	93	112	12	90
113	13	98	114	14	99
115	15	96	116	16	98
117	17	98	118	18	98
119	19	95	120	20	87
121	21	59	122	22	93
123	23	91	124	24	91
125	25	91	126	26	91
127	27	89	128	28	97
129	29	97	130	30	66
131	31	98	132	32	99
133	33	97	134	34	85
135	35	96	136	36	99
137	37	100	138	38	99
139	39	55	140	40	95
141	41	96	142	42	100
143	43	99	144	44	100
145	45	100	146	46	95

Compound Number	Example	Efficacy (%) at 10 μM	Compound Number	Example	Efficacy (%) at 10 μM
147	47	100	148	48	97
149	49	92	150	50	96
151	51	94	152	52	94
153	53	98	154	54	99
155	55	90	156	56	72
157	57	89	158	58	95
159	59	88	160	60	99
161	61	88	162	62	98
163	63	90	164	64	98
165	65	97	166	66	99
167	67	95	168	68	97
169	69	97	170	70	na
171	71	97	172	72	96
173	73	53	174	74	96
175	75	99	176	76	na
177	77	95	178	78	99
179	79	95	180	80	99
181	81	98	182	82	99
183	83	74	184	84	92
185	85	89	186	86	98
187	87	97	188	88	96
189	89	na	190	90	78
191	91	95	192	92	83
193	93	62	194	94	99
195	95	93	196	96	40
197	97	41	198	98	22
199	99	31	200	100	100
201	101	23	202	102	63
203	103	99	204	104	98
205	105	99	206	106	52
207	107	93	208	108	99
209	109	96	210	110	92
211	111	37	212	112	81
213	113	78	214	114	88
215	115	76	216	116	99
217	117	98	218	118	87

Compound Number	Example	Efficacy (%) at 10 μM	Compound Number	Example	Efficacy (%) at 10 μM
219	119	94	220	120	96
221	121	60	222	122	86
223	123	67	224	124	96
225	125	93	226	126	94
227	127	98	228	128	99
229	129	99	230	130	100
231	131	79	232	132	94
233	133	99	234	134	77
235	135	78	236	136	96
237	137	100	238	138	96
239	139	99	240	140	85
241	141	84	242	142	97
243	143	98	244	144	94
245	145	99	246	146	88
247	147	95	248	148	99
249	149	50	250	150	97
251	151	99	252	152	64
253	153	99	254	154	65
255	155	57	256	156	94
257	157	81	258	158	100
259	159	99	260	160	73
261	161	98	262	162	90
263	163	99	264	164	99
265	165	97	266	166	99
267	167	100	268	168	100
269	169	97	270	170	99
271	171	84	272	172	95
273	173	97	274	174	99
275	175	92	276	176	56
277	177	61	278	178	79
279	179	30	280	180	94
281	181	94	282	182	84
283	183	98	284	184	62
285	185	89	286	186	78
287	187	74	288	188	96
289	189	62	290	190	77

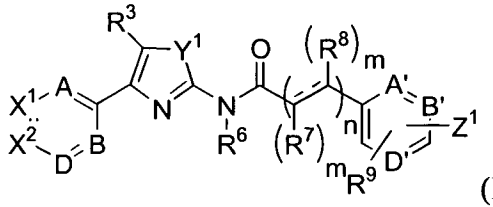
Compound Number	Example	Efficacy (%) at 10 μM	Compound Number	Example	Efficacy (%) at 10 μM
291	191	79	292	192	98
293	193	21	294	194	79
295	195	97	296	196	95
297	197	91	298	198	91
299	199	94	300	200	96
301	201	96	302	202	97
303	203	97	304	204	99
305	205	61	306	206	97
307	207	98	308	208	96
309	209	97	310	210	95
311	211	96	312	212	96
313	213	99	314	214	27
315	215	59	316	216	71
317	217	94	318	218	80
319	219	99	320	220	82
321	221	99	322	222	99
323	223	94	324	224	90
325	225	95	326	226	96
327	227	89	328	228	96
329	229	99	330	230	100
331	231	99	332	232	69
333	233	53	334	234	98
335	235	99	336	236	98
337	237	98	338	238	100
339	239	81	340	240	99
341	241	100	342	242	100
343	243	100	344	244	99
345	245	99	346	246	64
347	247	99	348	248	100
349	249	94	350	250	100
351	251	100	352	252	88
353	253	40	354	254	68
355	255	61	356	256	98
357	257	81	358	258	99
359	259	97	360	260	57
361	261	37	362	262	93

Compound Number	Example	Efficacy (%) at 10 μM	Compound Number	Example	Efficacy (%) at 10 μM
363	263	99	364	264	99
365	265	99	366	266	77
367	267	92	368	268	86
369	269	100	370	270	90
371	271	73	372	272	87
373	273	93	374	274	86

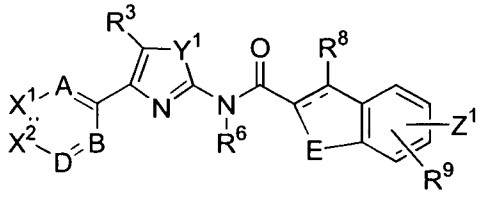
"na" = not active

We claim:

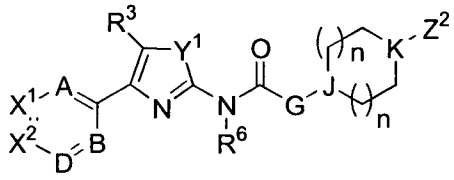
1. A compound having a structure selected from among Formula II-IV:



(II)



(III)



(IV)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl and C_1-C_{10} heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, $-CH_2-$, CH_2CH_2-, $-CR^7=CR^8-$ and $-CR^7=N-$;

G is $-(CH_2)_{0-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

Z^2 is the same as Z^1 when K is CH; or Z^2 is a group selected from C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, and C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$, and $CONR^aR^b$ when K is N;

m is selected from among 0, 1, and 2;

n is selected from among 0, 1 and 2; and

the dotted lines indicate optional double bonds;

and a pharmaceutically acceptable salt or prodrug thereof;

provided that in formula II, when n = 0, then R^4 and R^5, and/or, Z^1 and R^9 are linked to form a non-aromatic ring;

provided that in formula II, when R^4 and R^5 are not linked to form a non-aromatic ring, n is 1, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$; and

provided that in formula III, when R^4 and R^5 are not linked to form a non-aromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

2. The compound of claim 1, wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, CF_3 and C_1-C_4 alkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, CH_3, C_2H_5;

R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is C_1-C_8 alkyl or C_1-C_8 haloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

A, B, and D each independently is CH or N;

A′, B′, and D′ are C;

E is selected from among S, O, NR^7, $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

3. The compound of claim 1, wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, C_1-C_6 alkyl, C_1-C_6 haloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, C_1-C_4 alkyl, C_1-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen and C_1-C_4 alkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b are each independently is selected from among C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

E is selected from among S, O, NR^7, $-CR^7=CR^7-$;

G is $-(CH_2)_{0-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

Z^2 is the same as Z^1 when K is CH; or Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, $(CH_2)_mR^c$, $S(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

m is selected from among 0, 1, and 2; and

n is 1 or 2.

4. The compound of claim 3, wherein R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, CF_3 and C_1-C_4 alkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, CH_3 and C_2H_5;

R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is C_1-C_8 alkyl or C_1-C_8 haloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

A, B, and D each independently is CH or N;

A′, B′, and D′ are C;

E is selected from among S, O, NR^7 and $-CR^7=CR^7-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from 0, 1, and 2; and

n is 1 or 2.

5. The compound of claim 3, wherein:

R^3 is selected from among hydrogen, OCH_3, CH_3;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3 and CH_3; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring; and

R^6 is hydrogen; and R^7 and R^8 are independently selected from among hydrogen, CF_3 and CH_3.

6. The compound of claim 3, wherein R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring.

7. The compound of claim 3, wherein Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring.

8. A compound selected from among:

N-[4-(2-Oxo-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-4-diethylaminosulfonyl-benzamide (Compound 152);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 153);

N-[4-(3,4-Dihydro-3-oxo-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 154);

N-[4-(2,3-Dihydro-2-oxobenzoxazin-6-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 155);

N-[4-(3-Oxo-3,4-dihydro-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-4-(1-piperidine-sulfonyl)benzamide (Compound 156);

N-[4-(2-Oxo-2,3-dihydrobenzooxazol-6-yl)thiazol-2-yl]-4-(1-piperidinesulfonyl)-benzamide (Compound 157);

N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 158);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipropylaminosulfonyl- benzamide (Compound 159);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 160);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(N-methyl-N-hexylamino)-sulfonylbenzamide (Compound 161);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dibutylamino)sulfonyl-benzamide (Compound 162);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipentylamino)sulfonyl-benzamide (Compound 163);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylthiophenyl)acrylamide (Compound 164);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylthiophenyl)acrylamide (Compound 165);

N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3(E)-(4-dipropyl-amino)sulfonylacrylamide (Compound 166);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 167);

N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropyl-amino)sulfonylpropionamide (Compound 168);

N-[4-(1,3-Benzodioxol-5-yl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 169);

N-[4-Phenyl-2-thiazolyl]-3(E)-(4-acetylamino)phenylacrylamide (Compound 170);

N-[4-(2,3-Dihydro-5-benzofuranyl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 171);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylsulfonylphenyl)acrylamide (Compound 172);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfoxidephenyl)acrylamide (Compound 173);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylphenyl)propionamide (Compound 174);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylthiophenyl)acrylamide (Compound 175);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-nonanylthiophenyl)acrylamide (Compound 176);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)thiophenyl)-acrylamide (Compound 177);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylthiophenyl)propionamide (Compound 178);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylthiophenyl)-acrylamide (Compound 179);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropyl)thiophenyl)-acrylamide (Compound 180);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allylthiophenyl)acrylamide (Compound 181);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylthiophenyl)acrylamide (Compound 182);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylsulfonylphenyl)acrylamide (Compound 183);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylbenzyl)thiophenyl)-acrylamide (Compound 184);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-thiophenyl)acrylamide (Compound 185);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylsulfonyl-phenyl)acrylamide (Compound 186);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropylsulfonyl-phenyl)acrylamide (Compound 187);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylthio-phenyl)acrylamide (Compound 188);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(2-(1-piperidinyl)ethoxy)-benzamide (Compound 189);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-trifluoroacetylaminophenyl)-propionamide (Compound 190);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-octylsulfonylaminophenyl)-propionamide (Compound 191);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylaminophenyl)-propionamide (Compound 192);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-propylsulfonylamino-phenyl)propionamide (Compound 193);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-butylsulfonylamino-phenyl)propionamide (Compound 194);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-octylsulfonylamino-phenyl)propionamide (Compound 195);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-bis-(2-hydroxyethyl)-aminosulfonylphenyl)propionamide (Compound 196);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloroethyl)aminocarbonylamino-phenyl)propionamide (Compound 197);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-butylaminocarbonylaminophenyl)-propionamide (Compound 198);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-ethylaminocarbonylaminophenyl)-propionamide (Compound 199);

N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-trifluoromethyl-4-nitrobenzamide (Compound 200);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N-propyl-3(E)-(4-propyloxyphenyl)-acrylamide (Compound 201);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-aminophenyl)acrylamide (Compound 202);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 203);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-dipropylaminosulfonylphenyl)-acrylamide (Compound 204);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthiophenyl)-acrylamide (Compound 205);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylsulfonylphenyl)acrylamide (Compound 206);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylsulfonylphenyl)acrylamide (Compound 207);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 208);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 209);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methoxyphenyl)methylsulfonyl-phenyl)acrylamide (Compound 210);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylaminocarbonylamino)-phenylacrylamide (Compound 211);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-hydroxyphenyl)acrylamide (Compound 212);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 213);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylphenyl)methylsulfonylphenyl)-acrylamide (Compound 214);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylphenyl)methyl-sulfonylphenyl)acrylamide (Compound 215);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylsulfonylphenyl)-acrylamide (Compound 216);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonylphenyl)-acrylamide (Compound 217);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxypropyl)-sulfonyl-phenyl)acrylamide (Compound 218);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)-sulfonyl-phenyl)acrylamide (Compound 219);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylsulfonylphenyl)-acrylamide (Compound 220);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylmethylphenyl)-acrylamide (Compound 221);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)thiophenyl)-acrylamide (Compound 222);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxyethyl)sulfonylphenyl)-acrylamide (Compound 223);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methoxyphenyl)acrylamide (Compound 224);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butoxyphenyl)acrylamide (Compound 225);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethyloxy)phenyl)-acrylamide (Compound 226);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 227);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-thienyl)methylthiophenyl)-acrylamide (Compound 228);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methylthio-phenyl)acrylamide (Compound 229);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methylsulfonyl-phenyl)acrylamide (Compound 230);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-isopropylphenyl)methylsulfonyl-phenyl)acrylamide (Compound 231);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 232);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyloxy)phenyl)-acrylamide (Compound 233);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylthiophenyl)-methoxyphenyl)-acrylamide (Compound 234);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethoxyphenyl)-methoxyphenyl)acrylamide (Compound 235);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorophenyl)-methoxyphenyl)-acrylamide (Compound 236);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 237);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(6-fluoro-1,3-benzodioxan-8-yl)-methoxyphenyl)acrylamide (Compound 238);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonylphenyl)-acrylamide (Compound 239);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexyethyl)sulfonylphenyl)-acrylamide (Compound 240);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-sulfonylphenyl)acrylamide (Compound 241);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,2-dihydro-5-benzofuranyl)-acrylamide (Compound 242);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,4-benzodioxan-6-yl)acrylamide (Compound 243);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-1,1,2,3,3,3-pentafluoropropyl-oxyphenyl)acrylamide (Compound 244);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-isopropyloxy-4-ethoxyphenyl)-acrylamide (Compound 245);

N-[4-(2-Oxo-2,3-dihydrobenzoxazol-6-yl)thiazol-2-yl]-3(E)-(4-(2-cyclohexyethyl)-sulfonylphenyl)acrylamide (Compound 246);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-fluorophenyl)methoxyphenyl)-acrylamide (Compound 247);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-propyloxyphenyl)-acrylamide (Compound 248);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthiophenyl)acrylamide (Compound 249);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(5-benzo-1,3-dioxolyl)acrylamide (Compound 250);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonyl)phenylacrylamide (Compound 251);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 252);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-furanylmethyl)thiophenyl)-acrylamide (Compound 253);

N-(3-Isoxazolyl)-3(E)-[4-(1,4-benzodioxan-6-yl)thiazol-2-yl]aminocarbonylphenylacrylamide (Compound 254);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 255);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 256);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)-methoxyphenyl)acrylamide (Compound 257);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)-methoxyphenyl)propionamide (Compound 258);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(8-methoxy-1,4-benzodioxan-6-yl)-acrylamide (Compound 259);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)-phenyl)acrylamide (Compound 260);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 261);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(8-methoxy-1,4-benzodioxan-6-yl)-propionamide (Compound 262);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 263);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 264);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 265);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 266);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-ethoxyphenyl)-acrylamide (Compound 267);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3,4-diethoxyphenyl)propionamide (Compound 268);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 269);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 270);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 271);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 272);

N-[4-(3-Pyridyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 273);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 274);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 275);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 276);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 277);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 278);

N-[4-(3-Pyridyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 279);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylaminosulfonyl-phenyl)-3-trifluoromethylacrylamide (Compound 280);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 281);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 282);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonyl-phenyl)-3-trifluoromethylacrylamide (Compound 283)

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 284);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethyl-acrylamide (Compound 285);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 286);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethyl-acrylamide (Compound 287);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoro-methylacrylamide (Compound 288);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethyl-acrylamide (Compound 289);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoro-methylacrylamide (Compound 290);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoromethyl-acrylamide (Compound 291);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoropropyl-oxy)phenyl)acrylamide (Compound 292);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-pyridylmethoxy)phenyl)-acrylamide (Compound 293);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-pyridylmethylsulfonyl)phenyl)-acrylamide (Compound 294);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propyloxyphenyl)acrylamide (Compound 295);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-propyloxyphenyl)acrylamide (Compound 296);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-butyloxyphenyl)acrylamide (Compound 297);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-cyclohexymethoxyphenyl)-acrylamide (Compound 298);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4,4,4-trifluorobutyloxy)phenyl)-acrylamide (Compound 299);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4,4,4-trifluorobutyloxy)phenyl)-acrylamide (Compound 300);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-trifluoromethoxyphenyl)-acrylamide (Compound 301);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2-hydroxy-3,3,3-trifluoropropyloxy)phenyl)acrylamide (Compound 302);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 303);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 304);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 305);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 306);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 307);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(3-methylbutoxy)phenyl)-acrylamide (Compound 308);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 309);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4-methylpentyloxy)phenyl)-acrylamide (Compound 310);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylbutoxy)phenyl)-acrylamide (Compound 311);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylpentyloxy)phenyl)-acrylamide (Compound 312);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 313);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-dipropylaminophenyl)-propionamide (Compound 314);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-propylaminophenyl)-propionamide (Compound 315);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-(2,2-difluoroethyl)-3-(4-aminophenyl)-propionamide (Compound 316);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2,2-trifluoroethoxy)phenyl)-acrylamide (Compound 317);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 318);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 319);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 320);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 321);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 322);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 323)

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-cyclohexymethoxyphenyl)-acrylamide (Compound 324);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-propyloxyphenyl)acrylamide (Compound 325);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 326);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-methylbutyloxy)-phenyl)acrylamide (Compound 327);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 328);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2,2,2-trifluoroethylamino)-phenyl)-propionamide (Compound 329);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2,2-trifluoroethyl)amino-phenyl)propionamide (Compound 330);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-benzyloxyphenyl)-acrylamide (Compound 331);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 332);

N-[4-(4-Methoxyphenyl)imidazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 333);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(2,2-difluoro-1,3-benzodioxol-5-yl)-propionamide (Compound 334);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-benzyloxyphenyl)-propionamide (Compound 335);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2-chloro-2,2-difluoroethyl)-aminophenyl)propionamide (Compound 336);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloro-2,2-difluoroethyl)-aminophenyl)-propionamide (Compound 337);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)acrylamide (Compound 338);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(5,5,6,6,6-pentafluorohexyl)-aminophenyl)acrylamide (Compound 339);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)propionamide (Compound 340);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(2,2-difluoroethoxy)-phenyl)acrylamide (Compound 341);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoropropyl)-sulfonylphenyl)acrylamide (Compound 342);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyl)sulfonylphenyl)-acrylamide (Compound 343);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-propylsulfonylamino-6-naphthamide (Compound 344);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 345);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-fluoro-2-benzofuranamide (Compound 346);

N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 347);

N-[4-(4-Pyridyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 348);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylthio-2-benzofuranamide (Compound 349);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonyl-2-benzofuranamide (Compound 350);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(2-furanyl)methylthio-2-benzofuranamide (Compound 351);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-5,6,7,8-tetrahydro-5,8-dioxathiopheno-[2,3-*b*]naphthalene-2-amide (Compound 352);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5,6,7,8-tetrahydro-5,8-dioxathiopheno[2,3-b]naphthalene-2-amide (Compound 353);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methyl-2-thiopheneamide (Compound 354);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methoxy-2-thiopheneamide (Compound 355);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-trifluoromethyl-2-thiopheneamide (Compound 356);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-octylsulfonyl)piperidinyl)acetamide (Compound 357);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-butylsulfonyl)piperidinyl)acetamide (Compound 358);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 359);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-octylsulfonyl)piperidinyl)butamide (Compound 360);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-butylsulfonyl)piperidinyl)-butamide (Compound 361);

N-[4-(2,3-Dihydro-2-oxo-1,4-benzoxazin-7-yl)thiazol-2-yl]-4-(4-(4-octylsulfonyl)-piperidinyl)butamide (Compound 362);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 363);

N-[4-(4-Fluoro-4-methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)acetamide (Compound 364);

N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)acetamide (Compound 365);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-bromophenyl)acrylamide (Compound 366);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N-2,2,2-trifluoroethyl-N-5,5,6,6,6-pentafluorohexylaminophenyl)propionamide (Compound 367);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)acrylamide (Compound 368);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 369);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-trifluoromethyl-3-(4-cyclohexyl-methoxyphenyl)acrylamide (Compound 370);

N-[4-(4-Cyanophenyl)thiazol-2-yl]-3(E)-(4-(3-fluoro)-benzyloxyphenyl)-acrylamide (Compound 371);

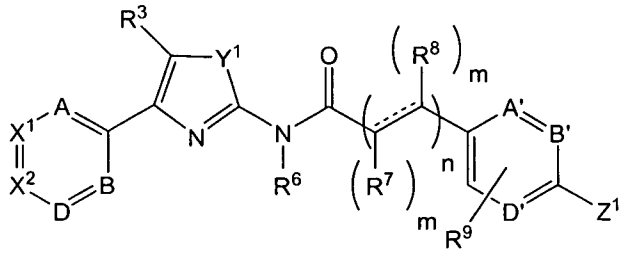
N-[4-(4-Nitrophenyl)thiazol-2-yl]-3(E)-(1-allyloxyphenyl)acrylamide (Compound 372);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexyl-methoxyphenyl)acrylamide (Compound 373);

N-[4-Methoxyphenyl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexylmethoxy-phenyl)acrylamide (Compound 374);

and a pharmaceutically acceptable salt or prodrug thereof.

9. A compound of Formula II:



(II)

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A', B, B', D and D' each independently is selected from among CH, CR^a and N;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and

$OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2;

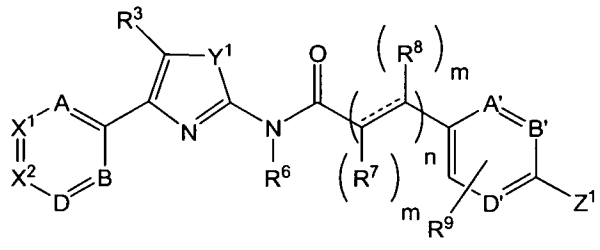
n is 1 or 2; and

the dotted line indicates an optional double bond;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that when R^4 and R^5 are not linked to form a non-aromatic ring, and n is 1, and R^a and R^b are not linked to form a non-aromatic 5-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

10. A compound of Formula II:



(II)

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, C_2-C_6 alkyl, C_2-C_6 haloalkyl and C_2-C_6 heteroalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, C_2-C_{10} alkyl and C_2-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen or C_1-C_4 alkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, C_1-C_{10} heteroalkyl, C_1-C_{10} heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

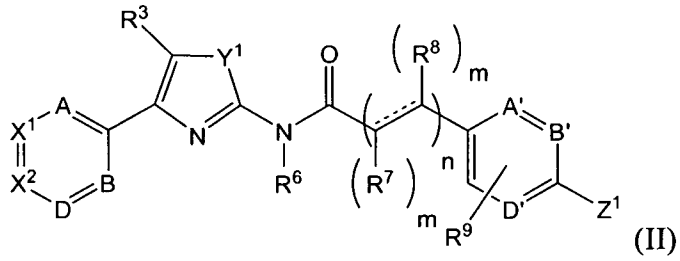
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted line indicates an optional double bond;

and pharmaceutically acceptable salts and prodrugs thereof.

11. A compound of Formula II:



(II)

wherein:

R^3 is selected from among hydrogen, OCH_3, C_3-C_6 alkyl, C_3-C_6 haloalkyl and C_3-C_6 heteroalkyl;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3, CHF_2, CH_2F, C_2-C_{10} alkyl and C_2-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen or C_2-C_4 alkyl;

R^7 and R^8 each independently is selected from among hydrogen, F, Cl, OCH_3, CF_3, CHF_2, CH_2F, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among halogen, OR^a, NR^aR^b, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_3-C_{10} alkyl, C_3-C_{10} haloalkyl, C_3-C_{10} heteroalkyl and C_3-C_{10} heterohaloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A', B, B', D and D' each independently is CH or N;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^1 is selected from among C_3-C_6 heteroalkyl, C_3-C_6 heterohaloalkyl, OR^a, NR^aR^b and $S(O)_mR^a$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

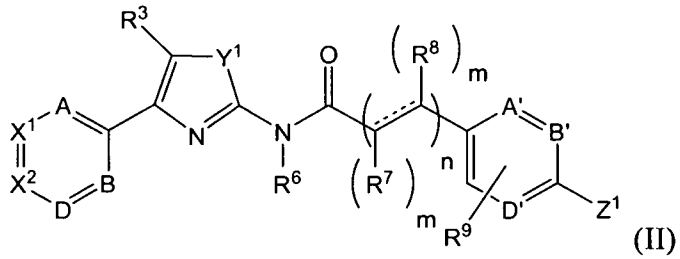
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted line indicates an optional double bond;

and pharmaceutically acceptable salts and prodrugs thereof.

12. A compound of Formula II:



(II)

wherein:

R^3 is hydrogen or halogen;

R^4 is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^5 is selected from among halogen, CN, NO_2 and C_1-C_4 heteroalkyl;

or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6, R^7 and R^8 are hydrogen;

R^9 is hydrogen or OR^a;

R^a and R^b each independently is selected from among hydrogen, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, C_1-C_{10} heteroalkyl, C_1-C_{10} heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from an optionally substituted aryl and an optionally substituted heteroaryl;

A, A', B and B' each independently is selected from CH and CR^9;

D is selected from among CH, CR^a and N;

D' is CH or CR^9;

X^1 is CR^4;

X^2 is N or CR^5;

Y^1 is S or O;

Z^1 is selected from among halogen, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, $S(O)_mR^a$, $NR^aSO_2R^b$ and $NR^aCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

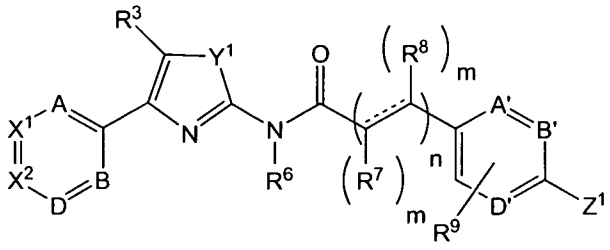
m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted line indicates an optional double bond;

and pharmaceutically acceptable salts and prodrugs thereof.

13. A compound of Formula II:



(II)

wherein:

R^3 is hydrogen or halogen;

R^4 is selected from among halogen, OR^a, $SO_2NR^aR^b$, C_1-C_{10} alkyl, C_1-C_{10} haloalkyl, and C_1-C_{10} heteroalkyl;

R^5 is selected from among halogen, CN, NO_2 and C_1-C_{10} heteroalkyl;

or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6, R^7 and R^8 are hydrogen;

R^9 is hydrogen or OR^a;

R^a and R^b each independently is selected from among hydrogen, C_4-C_{10} alkyl, C_4-C_{10} haloalkyl, C_4-C_{10} heteroalkyl, C_4-C_{10} heterohaloalkyl, an optionally substituted

aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B and B′ each independently is CH or CR^9;

D is selected from among CH, CR^a and N;

D′ is CH or CR^9;

X^1 is CR^4;

X^2 is N or CR^5;

Y^1 is S;

Z^1 is selected from among halogen, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, $S(O)_mR^a$, $NR^aSO_2R^b$ and $NR^aCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2;

n is 1 or 2; and

the dotted line indicates an optional double bond;

and pharmaceutically acceptable salts and prodrugs thereof.

14. The compound of Formula III of claim 1:

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted

aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, $-CH_2-$, $-CH_2CH_2-$, $-CR^7=CR^8-$ and $-CR^7=N-$;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is selected from among 0, 1 and 2;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that, when R^4 and R^5 are not linked to form a non-aromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a or $SO_2NR^aR^b$.

15. The compound of Formula III of claim 1:

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from among an optionally substituted aryl and an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, $-CH_2-$, $-CH_2CH_2-$, $-CR^7=CR^8-$ and $-CR^7=N-$;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is selected from among NR^a, O, and S;

Z^1 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is selected from among 0, 1 and 2;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that, when R^4 and R^5 are not linked to form a non-aromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a and $SO_2NR^aR^b$.

16. The compound of Formula III of claim 1:

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, C_1-C_6 alkyl and C_1-C_6 haloalkyl;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen or C_1-C_4 alkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^8-$;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^a or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, COR^a, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof;

provided that, when R^4 and R^5 are not linked to form a non-aromatic ring, and R^a and R^b are not linked to form a non-aromatic 4-7 member ring, then Z^1 is not COR^a.

17. The compound of Formula III of claim 1:

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, halogen, OR^a, CF_3, CHF_2, CH_2F, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen, CH_3 or C_2H_5;

R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from among an optionally substituted aryl and an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ are each CH;

E is selected from among S, O, NR^7 and $-CR^7=CR-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

18. The compound of Formula III of claim 1, wherein:

R^3 is selected from among halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OR^a, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen;

R^7 and R^8 each independently is selected from among hydrogen, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^8-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

19. The compound of Formula III of claim 1:

wherein:

R^3 is selected from among halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among hydrogen, F, Cl, OR^a, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen;

R^7 and R^8 each independently is selected from among hydrogen, CF_3, CHF_2, CH_2F, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^8-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

20. The compound of Formula III of claim 1:

wherein:

R^3 is selected from among hydrogen, halogen, OCH_3, CH_3 and C_2H_5;

R^4 and R^5 each independently is selected from among OR^a, CF_3, CHF_2, CH_2F, C_1-C_{10} alkyl and C_1-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is hydrogen, CH_3 or C_2H_5;

R^7 and R^8 each independently is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among OR^a, NR^aR^b and C_1-C_4 alkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, B and D each independently is CH or N;

A′, B′ and D′ are CH;

E is selected from among S, NR^7 and $-CR^7=CR^8-$;

X^1 is CR^4;

X^2 is CR^5;

Y^1 is NH or S;

Z^1 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$; or Z^1 and R^9 are linked to form a non-aromatic optionally substituted 5-7 member ring;

m is selected from among 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

21. The compound of Formula IV of claim 1:

wherein:

R^3 is selected from among hydrogen, halogen, CN, NO_2, OR^a, C_2-C_6 alkyl, C_2-C_6 haloalkyl, C_2-C_6 heteroalkyl and C_2-C_6 heterohaloalkyl;

R^4 and R^5 each independently is selected from among CN, NO_2, OR^a, $SO_2NR^aR^b$, C_1-C_4 alkyl, C_1-C_{10} haloalkyl and C_1-C_{10} heteroalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl, C_1-C_4 haloalkyl and C_1-C_4 heteroalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl and an optionally substituted heteroaryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is selected from among CH, CR^a and N;

E is selected from among S, O, NR^7, $-CH_2-$, $-CH_2CH_2-$, $-CR^7=CR^8-$ and $-CR^7=N-$;

G is $-(CH_2)_{1-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^a or S;

Z^2 is selected from among halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, $NR^aCO_2R^b$, NR^aCOR^b,

COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $NR^aSO_2R^b$, $SO_2NR^aR^b$, $NR^aCONR^aR^b$ and $OCONR^aR^b$ when K is CH; or

Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

m is selected from among 0, 1, and 2; and

n is selected from among 0, 1 and 2;

and pharmaceutically acceptable salts and prodrugs thereof.

22. The compound of Formula IV of claim 1:

wherein:

R^3 is selected from among hydrogen, halogen, OR^a, C_2-C_6 alkyl and C_2-C_6 haloalkyl;

R^4 and R^5 each independently is selected from among CN, NO_2, OR^a, C_1-C_{10} alkyl and C_1-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl; or R^7 and R^8 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^9 is selected from among hydrogen, halogen, OR^a, NR^aR^b, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^a and R^b each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl and an optionally substituted aryl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is selected from among an optionally substituted aryl and an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

E is selected from among S, O, NR^7 and $-CR^7=CR^8-$;

G is $-(CH_2)_{1-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^a or S;

Z^2 is selected from among C_1-C_6 heteroalkyl, OR^a, NR^aR^b, $S(O)_mR^a$, $NR^aSO_2R^b$ when K is CH; or

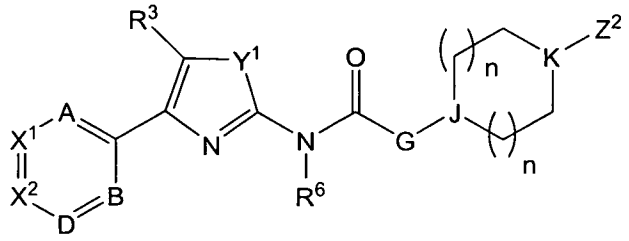
Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^c$, OR^a, NR^aR^b, CO_2R^b, COR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$, $SO_2NR^aR^b$ and $CONR^aR^b$ when K is N;

m is selected from 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

23. A compound of Formula IV:



(IV)

wherein:

R^3 is selected from hydrogen, halogen, OR^a, CF_3, CHF_2 and CH_2F;

R^4 and R^5 are independently selected from among F, OR^a, C_5-C_{10} alkyl and C_5-C_{10} haloalkyl; or R^4 and R^5 are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^6 is selected from among hydrogen, C_2-C_4 alkyl and C_2-C_4 haloalkyl;

R^7 and R^8 each independently is selected from among hydrogen, halogen, C_1-C_4 alkyl and C_1-C_4 haloalkyl;

R^9 is selected from among hydrogen, OR^a, NR^aR^b, C_1-C_{10} alkyl and C_1-C_{10} haloalkyl;

R^a and R^b are selected from hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl and C_1-C_8 heterohaloalkyl; or R^a and R^b are linked to form a non-aromatic optionally substituted 5-7 member ring;

R^c is an optionally substituted aryl or an optionally substituted heteroaryl;

A, A′, B, B′, D and D′ each independently is CH or N;

E is selected from S, O, NR^7 and $-CR^7=CR^7-$;

G is $-(CH_2)_{1-4}-$ or $-(CH=CH)_{1-2}-$;

J and K each independently is N or CH;

X^1 is N or CR^4;

X^2 is N or CR^5;

Y^1 is NR^7 or S;

Z^2 is selected from among C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, OR^a, NR^aR^b, $S(O)_mR^a$ and $NR^aSO_2R^b$ when K is CH; or

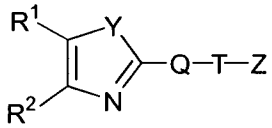
Z^2 is selected from among C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, $(CH_2)_mR^c$, OR^a, $S(O)_mR^a$, $(CH_2)_mS(O)_mR^a$ and $SO_2NR^aR^b$ when K is N;

m is selected from 0, 1, and 2; and

n is 1 or 2;

and pharmaceutically acceptable salts and prodrugs thereof.

24. A compound having a structure of Formula I:



(I)

wherein:

R^1 is selected from among hydrogen, halogen, CN, NO_2, OR^C, NR^CR^D, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl and C_1-C_6 heterohaloalkyl;

R^2 is an optionally substituted monocyclic ring or an optionally substituted bicyclic ring system;

Y is selected from a group of NR^A, O, and S;

R^A is selected from a group of hydrogen, OH, CN, NO_2, $(CH_2)_mR^B$, COR^C, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, and C_1-C_6 heterohaloalkyl;

R^B is selected from an optionally substituted aryl and an optionally substituted heteroaryl;

R^C and R^D are independently selected from hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_1-C_8 heterohaloalkyl, an optionally substituted aryl, and an optionally substituted heteroaryl; or R^C and R^D are optionally linked to form a non-aromatic 4-8 member ring;

Q is selected from a group of an optionally substituted C_1-C_{10} alkyl, an optionally substituted C_1-C_{10} heteroalkyl, and an optionally substituted C_1-C_{10} haloalkyl;

T is an optionally substituted monocyclic 5-7 member ring or an optionally substituted bicyclic ring;

Z is a group selected from hydrogen, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 heteroalkyl, C_1-C_6 heterohaloalkyl, $(CH_2)_mR^B$, OR^C, NR^CR^D, $OCONR^CR^D$, $NR^CCO_2R^D$, NR^CCOR^D, $NR^CCONR^CR^D$, COR^C, CO_2R^C, $S(O)_mR^C$, $(CH_2)_mS(O)_mR^C$, $NR^CSO_2R^D$, $SO_2NR^CR^D$, and $CONR^CR^D$;

m is selected from 0, 1, and 2;and pharmaceutically acceptable salts and prodrugs thereof; and

thereby modulating an activity of an androgen receptor.

25. A compound selected from among:

N-[4-(4-Bromophenyl)thiazol-2-yl]-1-naphthamide (Compound 101);

N-[4-(4-Bromophenyl)thiazol-2-yl]-4-dipropylaminosulfonylbenzamide (Compound 102);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-dipropylaminosulfonylbenzamide (Compound 103);

N-[4-(3,4-Difluoro-phenyl)-thiazol-2-yl]-4-dipropylsulfamoyl-benzamide (Compound 104);

N-(4-(2-Naphthyl)thiazol-2-yl)-4-dipropylaminosulfonylbenzamide (Compound 105);

N-[4-(4-Bromophenyl)thiazol-2-yl]-4-*tert*-butylbenzamide (Compound 106);

N-[4-(4-Bromophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 107);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 108);

N-(4-(4-Methylphenyl)thiazol-2-yl)-4-diethylaminosulfonylbenzamide (Compound 109);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 110);

N-[4-(4-Cyanophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 111);

N-[4-(4-Nitrophenyl)thiazol-2-yl]-4-diethylaminosulfonylbenzamide (Compound 112);

N-[4-(4-Cyanophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 113);

N-[4-(4-Pyridyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)propionamide (Compound 114);

N-[4-(3-Pyridyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)propionamide (Compound 115);

N-[4-(4-Acetylamino-3-nitrophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonyl-phenyl)propionamide (Compound 116);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N-methyl-N-pentylaminosulfonyl)-benzamide (Compound 117);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N-methyl-N-hexylaminosulfonyl)-benzamide (Compound 118);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dibutylaminosulfonyl)benzamide (Compound 119);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dipentylaminosulfonyl)-benzamide (Compound 120);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(N,N-dihexylaminosulfonyl)-benzamide (Compound 121);

N-[4-(3-Methoxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 122);

N-[4-(2,4-Dimethoxyphenyl)-5-methylthiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)benzamide (Compound 123);

N-[4-(2,4-Dimethoxyphenyl)-5-methylthiazol-2-yl]-4-N-methyl-N-hexylaminosulfonylphenyl)benzamide (Compound 124);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N',N'-dipropylaminocarbonyl-1,4-benzenedicarboxamide (Compound 125);

N-[4-(3-Hydroxyphenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 126);

N-(4-(4-Pyridinyl)thiazol-2-yl)-4-dipropylaminosulfonylbenzamide (Compound 127);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-(4-dipropylaminosulfonylphenyl)-acrylamide (Compound 128);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N',N'-dibutylaminocarbonyl-1,4-benzene-dicarboxamide (Compound 129);

N-[4-(6-Methoxy-2-naphthyl)thiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)-benzamide (Compound 130);

N-[4-(2,4-Dimethoxyphenyl)thiazol-2-yl]-4-N,N-dipropylamino-sulfonylphenyl)-benzamide (Compound 131);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-(4-dipropylaminosulfonylphenyl)-2-methylacrylamide (Compound 132);

N-[4-(2-Fluoro-4-methoxyphenyl)thiazol-2-yl]-4-N-methyl-N-hexylamino-sulfonylphenyl)benzamide (Compound 133);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(*E*)-phenylacrylamide (Compound 134);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 135);

N-[4-(2,4-Dimethoxyphenyl)thiazol-2-yl]-3-(4-N-methyl-N-hexylamino-sulfonylphenyl)propionamide (Compound 136);

N-[4-(Diethylaminosulfonylphenyl)thiazol-2-yl]-4-nitro-3-trifluoromethyl-benzamide (Compound 137);

N-[4-(Dipropylaminosulfonylphenyl)thiazol-2-yl]-4-methoxybenzamide (Compound 138);

N-[4-Methoxyphenyl)thiazol-2-yl]-4-(4-dipropylaminosulfonylphenyl)-benzamide (Compound 139);

N-[4-Methoxyphenyl)thiazol-2-yl]-4-propylthiomethylbenzamide (Compound 140);

N-(4-(4-Methoxyphenyl)thiazol-2-yl)-4-cyclohexymethoxybenzamide (Compound 141);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-diethylaminosulfonyl-phenyl)propionamide (Compound 142);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-dipropylaminosulfonyl-phenyl)propionamide (Compound 143);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-N,N-bisisopropyl-aminosulfonylphenyl)propionamide (Compound 144);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2,2-dimethyl-3-(4-N-methyl-N-hexylaminosulfonylphenyl)propionamide (Compound 145);

(±)-N-(2-Tetrahydropyrano)oxa-3(E)-(4-(4-(4-methoxyphenyl)thiazol-2-yl)-amino-carbonylphenyl)acrylamide (Compound 146);

(±)-N-(4-Methoxyphenyl)thiazol-2-yl)-3(E)-(4-(2-tetrahydropyrano)oxa-aminocarbonyl-phenyl)acrylamide (Compound 147) ;

N-(4-Methoxyphenyl)thiazol-2-yl)-4-(6-indano)carbonylbenzamide (Compound 148) ;

N-(4-(4-Methoxyphenyl)-2-thiazolyl)-N'-(4-cyclohexylmethylaminosulfonyl)-phenylurea (Compound 149);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(3-methoxypropyl)aminosulfonyl-phenyl)propionamide (Compound 150);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-trifluoromethyl-3-(4-dipropylamino-sulfonylphenyl)acrylamide (Compound 151);

N-[4-(2-Oxo-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-4-diethylaminosulfonyl-benzamide (Compound 152);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 153);

N-[4-(3,4-Dihydro-3-oxo-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-3-(4-dipropyl-aminosulfonylphenyl)propionamide (Compound 154);

N-[4-(2,3-Dihydro-2-oxobenzoxazin-6-yl)thiazol-2-yl]-3-(4-dipropylamino-sulfonylphenyl)propionamide (Compound 155);

N-[4-(3-Oxo-3,4-dihydro-2*H*-benzo[1,4]oxazin-6-yl)thiazol-2-yl]-4-(1-piperidine-sulfonyl)benzamide (Compound 156);

N-[4-(2-Oxo-2,3-dihydrobenzooxazol-6-yl)thiazol-2-yl]-4-(1-piperidine-sulfonyl)-benzamide (Compound 157);

N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropyl-aminosulfonylphenyl)propionamide (Compound 158);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipropylamino-sulfonylbenzamide (Compound 159);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3-(4-dipropylaminosulfonylphenyl)-propionamide (Compound 160);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(N-methyl-N-hexylamino)-sulfonylbenzamide (Compound 161);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dibutylamino)-sulfonyl-benzamide (Compound 162);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-dipentylamino)-sulfonyl-benzamide (Compound 163);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylthiophenyl)acrylamide (Compound 164);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylthiophenyl)acrylamide (Compound 165);

N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3(E)-(4-dipropylamino)sulfonylacrylamide (Compound 166);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 167);

N-[4-(2,3-Dihydro-3,3-dimethyl-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-3-(4-dipropylamino)sulfonylpropionamide (Compound 168);

N-[4-(1,3-Benzodioxol-5-yl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 169);

N-[4-Phenyl-2-thiazolyl]-3(E)-(4-acetylamino)phenylacrylamide (Compound 170);

N-[4-(2,3-Dihydro-5-benzofuranyl)thiazol-2-yl]-3-(4-dipropylamino)sulfonyl-propionamide (Compound 171);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-pentylsulfonylphenyl)-acrylamide (Compound 172);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfoxidephenyl)-acrylamide (Compound 173);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylphenyl)-propionamide (Compound 174);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylthiophenyl)acrylamide (Compound 175);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-nonanylthiophenyl)acrylamide (Compound 176);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)thiophenyl)-acrylamide (Compound 177);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylthiophenyl)propionamide (Compound 178);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylthiophenyl)-acrylamide (Compound 179);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropyl)-thiophenyl)-acrylamide (Compound 180);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allylthiophenyl)acrylamide (Compound 181);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylthiophenyl)acrylamide (Compound 182);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-benzylsulfonylphenyl)-acrylamide (Compound 183);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylbenzyl)thiophenyl)-acrylamide (Compound 184);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-thiophenyl)-acrylamide (Compound 185);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylmethylsulfonyl-phenyl)acrylamide (Compound 186);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3,3,3-trifluoropropylsulfonyl-phenyl)-acrylamide (Compound 187);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylthio-phenyl)-acrylamide (Compound 188);

N-[4-(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)thiazol-2-yl]-4-(2-(1-piperidinyl)-ethoxy)-benzamide (Compound 189);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-trifluoroacetylaminophenyl)-propionamide (Compound 190);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-octylsulfonylaminophenyl)-propionamide (Compound 191);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-propylsulfonylaminophenyl)-propionamide (Compound 192);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-propylsulfonylamino-phenyl)propionamide (Compound 193);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-butylsulfonylamino-phenyl)propionamide (Compound 194);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-octylsulfonylamino-phenyl)propionamide (Compound 195);

N-[4-(2,3-Dihydroxy-2-oxo-5-indolyl)thiazol-2-yl]-3-(4-bis-(2-hydroxyethyl)-aminosulfonylphenyl)propionamide (Compound 196);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloroethyl)amino-carbonylamino-phenyl)propionamide (Compound 197);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-butylaminocarbonylaminophenyl)-propionamide (Compound 198);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-ethylaminocarbonylaminophenyl)-propionamide (Compound 199);

N-[4-(1-Ethylsulfonyl-2,3-dihydro-1*H*-indol-5-yl)thiazol-2-yl]-3-trifluoro-methyl-4-nitrobenzamide (Compound 200);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-N-propyl-3(E)-(4-propyloxyphenyl)-acrylamide (Compound 201);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-aminophenyl)acrylamide (Compound 202);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-methyl-3(E)-(4-propylsulfonyl-phenyl)-acrylamide (Compound 203);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-dipropylaminosulfonyl-phenyl)-acrylamide (Compound 204);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthiophenyl)-acrylamide (Compound 205);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methylsulfonylphenyl)-acrylamide (Compound 206);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylsulfonylphenyl)acrylamide (Compound 207);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 208);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)-acrylamide (Compound 209);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methoxyphenyl)methyl-sulfonylphenyl)acrylamide (Compound 210);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-ethylaminocarbonylamino)-phenylacrylamide (Compound 211);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-hydroxyphenyl)acrylamide (Compound 212);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 213);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylphenyl)methyl-sulfonylphenyl)acrylamide (Compound 214);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylphenyl)-methylsulfonylphenyl)acrylamide (Compound 215);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylsulfonyl-phenyl)acrylamide (Compound 216);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonyl-phenyl)acrylamide (Compound 217);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxypropyl)-sulfonylphenyl)-acrylamide (Compound 218);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)-sulfonylphenyl)-acrylamide (Compound 219);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexylsulfonylphenyl)-acrylamide (Compound 220);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylmethylphenyl)-acrylamide (Compound 221);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexylethyl)thiophenyl)-acrylamide (Compound 222);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxyethyl)sulfonyl-phenyl)acrylamide (Compound 223);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-methoxyphenyl)acrylamide (Compound 224);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-butoxyphenyl)acrylamide (Compound 225);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethyloxy)phenyl)-acrylamide (Compound 226);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 227);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-thienyl)methylthiophenyl)-acrylamide (Compound 228);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methylthio-phenyl)acrylamide (Compound 229);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylphenyl)methyl-sulfonylphenyl)acrylamide (Compound 230);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-isopropylphenyl)methyl-sulfonylphenyl)acrylamide (Compound 231);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 232);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyloxy)phenyl)-acrylamide (Compound 233);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylthiophenyl)-methoxyphenyl)-acrylamide (Compound 234);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethoxyphenyl)-methoxyphenyl)acrylamide (Compound 235);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorophenyl)-methoxyphenyl)-acrylamide (Compound 236);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 237);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(6-fluoro-1,3-benzodioxan-8-yl)-methoxyphenyl)acrylamide (Compound 238);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-methylpropyl)sulfonylphenyl)-acrylamide (Compound 239);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2-cyclohexyethyl)sulfonylphenyl)-acrylamide (Compound 240);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-(4-(4-trifluoromethylbenzyl)-sulfonylphenyl)acrylamide (Compound 241);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,2-dihydro-5-benzofuranyl)-acrylamide (Compound 242);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(1,4-benzodioxan-6-yl)acrylamide (Compound 243);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-1,1,2,3,3,3-pentafluoropropyloxy-phenyl)acrylamide (Compound 244);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-isopropyloxy-4-ethoxy-phenyl)acrylamide (Compound 245);

N-[4-(2-Oxo-2,3-dihydrobenzoxazol-6-yl)thiazol-2-yl]-3(E)-(4-(2-cyclohexy-ethyl)sulfonylphenyl)acrylamide (Compound 246);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-fluorophenyl)methoxy-phenyl)acrylamide (Compound 247);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-propyloxyphenyl)-acrylamide (Compound 248);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(2-furanyl)methylthiophenyl)-acrylamide (Compound 249);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(5-benzo-1,3-dioxolyl)acrylamide (Compound 250);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-propylsulfonyl)phenyl-acrylamide (Compound 251);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 252);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2-furanylmethyl)thiophenyl)-acrylamide (Compound 253);

N-(3-Isoxazolyl)-3(E)-[4-(1,4-benzodioxan-6-yl)thiazol-2-yl]aminocarbonyl-phenylacrylamide (Compound 254);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 255);

N-[4-(4-Bromophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 256);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)-methoxyphenyl)acrylamide (Compound 257);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-(3,5-dimethyl-4-isoxazolyl)-methoxyphenyl)propionamide (Compound 258);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(8-methoxy-1,4-benzodioxan-6-yl)-acrylamide (Compound 259);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)-phenyl)acrylamide (Compound 260);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-propylsulfonylphenyl)acrylamide (Compound 261);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(8-methoxy-1,4-benzodioxan-6-yl)-propionamide (Compound 262);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 263);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 264);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 265);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(3,4-dimethoxyphenyl)-2(E),4(E)-pentadienamide (Compound 266);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-ethoxyphenyl)-acrylamide (Compound 267);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3,4-diethoxyphenyl)propionamide (Compound 268);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 269);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 270);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 271);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 272);

N-[4-(3-Pyridyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 273);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-3-methyl-2(E),4(E)-pentadienamide (Compound 274);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 275);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 276);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(4-N,N-bispropylaminosulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 277);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 278);

N-[4-(3-Pyridyl)thiazol-2-yl]-5-(4-N,N-bispropylamino-sulfonylphenyl)-2(E),4(E)-pentadienamide (Compound 279);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylaminosulfonyl-phenyl)-3-trifluoromethylacrylamide (Compound 280);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 281);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 282);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 283)

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-N,N-bispropylamino-sulfonylphenyl)-3-trifluoromethylacrylamide (Compound 284);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 285);

N-[4-(3-Fluoro-4-methoxyphenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethylacrylamide (Compound 286);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethyl-acrylamide (Compound 287);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoro-methylacrylamide (Compound 288);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(1,4-benzodioxan-6-yl)-3-trifluoromethyl-acrylamide (Compound 289);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoromethylacrylamide (Compound 290);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(Z)-(4-cyclohexymethoxyphenyl)-3-trifluoromethyl-acrylamide (Compound 291);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoropropyloxy)phenyl)acrylamide (Compound 292);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-pyridylmethoxy)phenyl)-acrylamide (Compound 293);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-pyridylmethylsulfonyl)phenyl)-acrylamide (Compound 294);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-propyloxyphenyl)acrylamide (Compound 295);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-propyloxyphenyl)acrylamide (Compound 296);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-butyloxyphenyl)acrylamide (Compound 297);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-cyclohexymethoxyphenyl)-acrylamide (Compound 298);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4,4,4-trifluorobutyloxy)phenyl)-acrylamide (Compound 299);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4,4,4-trifluorobutyloxy)phenyl)-acrylamide (Compound 300);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-trifluoromethoxyphenyl)-acrylamide (Compound 301);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2-hydroxy-3,3,3-trifluoropropyl-oxy)phenyl)acrylamide (Compound 302);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 303);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyloxy)phenyl)-acrylamide (Compound 304);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)-acrylamide (Compound 305);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 306);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 307);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(3-methylbutoxy)phenyl)-acrylamide (Compound 308);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 309);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-(4-methylpentyloxy)phenyl)-acrylamide (Compound 310);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-methylbutoxy)phenyl)-acrylamide (Compound 311);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(4-methylpentyloxy)phenyl)-acrylamide (Compound 312);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(1-ethylpropyloxy)phenyl)-acrylamide (Compound 313);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-dipropylaminophenyl)-propionamide (Compound 314);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-propyl-3-(4-propylaminophenyl)-propionamide (Compound 315);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-*N*-(2,2-difluoroethyl)-3-(4-aminophenyl)-propionamide (Compound 316);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2,2,2-trifluoroethoxy)phenyl)-acrylamide (Compound 317);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 318);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(2,2-diifluoroethoxy)phenyl)acrylamide (Compound 319);

N-[4-(3-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 320);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-cyclohexymethoxyphenyl)acrylamide (Compound 321);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-allyloxyphenyl)acrylamide (Compound 322);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-fluorobenzyloxy)phenyl)-acrylamide (Compound 323)

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-cyclohexymethoxyphenyl)-acrylamide (Compound 324);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-propyloxyphenyl)acrylamide (Compound 325);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(2,2-difluoroethoxy)phenyl)-acrylamide (Compound 326);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2-(3-methylbutyloxy)-phenyl)acrylamide (Compound 327);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-5-(1,4-benzodioxan-6-yl)-2(E),4(E)-pentadienamide (Compound 328);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2,2,2-trifluoroethylamino)-phenyl)propionamide (Compound 329);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2,2-trifluoroethyl)amino-phenyl)propionamide (Compound 330);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-benzyloxyphenyl)-acrylamide (Compound 331);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 332);

N-[4-(4-Methoxyphenyl)imidazol-2-yl]-3(E)-(2,2-difluoro-1,3-benzodioxol-5-yl)-acrylamide (Compound 333);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(2,2-difluoro-1,3-benzodioxol-5-yl)-propionamide (Compound 334);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(3-methoxy-4-benzyloxyphenyl)-propionamide (Compound 335);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2-chloro-2,2-difluoroethyl)-aminophenyl)propionamide (Compound 336);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-(2-chloro-2,2-difluoroethyl)-aminophenyl)propionamide (Compound 337);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)acrylamide (Compound 338);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(5,5,6,6,6-pentafluorohexyl)-aminophenyl)acrylamide (Compound 339);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N,N-bis(2,2-difluoroethyl)-aminophenyl)propionamide (Compound 340);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(3-methoxy-4-(2,2-difluoroethoxy)-phenyl)acrylamide (Compound 341);

(±)-*N*-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(2-hydroxy-3,3,3-trifluoropropyl)-sulfonylphenyl)acrylamide (Compound 342);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-(3-hydroxypropyl)sulfonylphenyl)-acrylamide (Compound 343);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-propylsulfonylamino-6-naphthamide (Compound 344);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 345);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-fluoro-2-benzofuranamide (Compound 346);

N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 347);

N-[4-(4-Pyridyl)thiazol-2-yl]-5-propylsulfonylamino-2-benzothiopheneamide (Compound 348);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylthio-2-benzofuranamide (Compound 349);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-propylsulfonyl-2-benzofuranamide (Compound 350);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-(2-furanyl)methylthio-2-benzofuranamide (Compound 351);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-5,6,7,8-tetrahydro-5,8-dioxathiopheno[2,3-b]naphthalene-2-amide (Compound 352);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5,6,7,8-tetrahydro-5,8-dioxathiopheno-[2,3-b]naphthalene-2-amide (Compound 353);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methyl-2-thiopheneamide (Compound 354);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-chloro-6-methoxy-2-thiopheneamide (Compound 355);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-5-trifluoromethyl-2-thiopheneamide (Compound 356);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-octylsulfonyl)piperidinyl)-acetamide (Compound 357);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-butylsulfonyl)piperidinyl)-acetamide (Compound 358);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 359);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-octylsulfonyl)piperidinyl)-butamide (Compound 360);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-4-(4-(4-butylsulfonyl)piperidinyl)-butamide (Compound 361);

N-[4-(2,3-Dihydro-2-oxo-1,4-benzoxazin-7-yl)thiazol-2-yl]-4-(4-(4-octylsulfonyl)piperidinyl)butamide (Compound 362);

N-[4-(4-Fluorophenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)piperidinyl)-acetamide (Compound 363);

N-[4-(4-Fluoro-4-methoxyphenyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)acetamide (Compound 364);

N-[4-(2,3-Dihydro-2-oxo-5-indolyl)thiazol-2-yl]-2-(4-(4-propylsulfonyl)-piperidinyl)acetamide (Compound 365);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3(E)-(4-bromophenyl)acrylamide (Compound 366);

N-[4-(4-Methoxyphenyl)thiazol-2-yl]-3-(4-N-2,2,2-trifluoroethyl-N-5,5,6,6,6-pentafluorohexylaminophenyl)propionamide (Compound 367);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-(3-fluorobenzyloxy)phenyl)acrylamide (Compound 368);

N-[4-(4-Pyridyl)thiazol-2-yl]-3(E)-(4-butylsulfonylphenyl)acrylamide (Compound 369);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(Z)-trifluoromethyl-3-(4-cyclohexyl-methoxyphenyl)acrylamide (Compound 370);

N-[4-(4-Cyanophenyl)thiazol-2-yl]-3(E)-(4-(3-fluoro)-benzyloxyphenyl)-acrylamide (Compound 371);

N-[4-(4-Nitrophenyl)thiazol-2-yl]-3(E)-(1-allyloxyphenyl)acrylamide (Compound 372);

N-[4-(1,4-Benzodioxan-6-yl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexylmethoxyphenyl)acrylamide (Compound 373); and

N-[4-Methoxyphenyl)thiazol-2-yl]-3(E)-trifluoromethyl-3-(4-cyclohexylmethoxy-phenyl)acrylamide (Compound 374);

and a pharmaceutically acceptable salt or prodrug thereof.

26. The compound of any of claims 1-25, wherein the compound is a selective androgen receptor modulator.

27. The compound of claim 26, wherein the compound is a selective androgen receptor agonist.

28. The compound of claim 26, wherein compound is a selective androgen receptor antagonist.

29. The compound of claim 26, wherein the compound is a selective androgen receptor partial agonist.

30. The compound of claim 26, wherein the compound is a tissue-selective modulator.

31. The compound of any of claims 1-25, wherein the compound is a selective androgen receptor binding compound.

32. The compound of any of claims 1-25, wherein the compound is a selective androgen receptor reducing compound.

33. The compound of claim 32, wherein the compound is a selective androgen receptor degrading compound.

34. The compound of claim 28, wherein the compound has an AR antagonist efficacy at 10 mM of at least 80%.

35. The compound of claim 28, wherein the compound has an AR antagonist efficacy at 10 mM of at least 85%.

36. The compound of claim 28, wherein the compound has an AR antagonist efficacy at 10 mM of at least 90%.

37. The compound of claim 28, wherein the compound has an AR antagonist efficacy at 10 mM of at least 95%.

38. A method for modulating a target activity of an androgen receptor, comprising contacting an androgen receptor with a compound of any of claims 1-37, thereby modulating the target activity.

39. The method of claim 38, wherein the androgen receptor is contacted with a compound of claim 25.

40. The method of claim38, wherein the androgen receptor is in a cell.

41. A method for reducing the number of androgen receptors in a cell, comprising contacting a cell expressing androgen receptor with a compound of any of claims 1-33 and thereby reducing the number of androgen receptor in the cell.

42. The method of claim 41, wherein contacting the cell expressing androgen receptor with the compound of any of claims 1-37 results in degradation of androgen receptors in a cell.

43. A method for treatment, prevention or amelioration of one or more symptoms of an androgen receptor mediated disease or disorder, comprising:

identifying a subject having an androgen receptor mediated disease or disorder; and

administering to the subject a pharmaceutical composition comprising a compound of any of claims 1-37.

44. The method of claim 43, wherein the disease or disorder is selected from among loss of muscle strength and function; frailty or age-related functional decline ("ARFD") in the elderly, sarcopenia; catabolic side effects of glucocorticoids; reduced bone mass, density or growth; osteoporosis; osteopenia; chronic fatigue syndrome

(CFS); chronic myalgia; acute fatigue syndrome and muscle loss following elective surgery; slow wound healing; slow bone fracture repair; distraction osteogenesis; post-surgical adhesion formation; slow tooth repair or growth; loss of sensory function; loss of hearing, sight, olefaction or taste; periodontal disease; wasting secondary to fractures and wasting in connection with chronic obstructive pulmonary disease (COPD), chronic liver disease, AIDS, weightlessness, cancer cachexia, burn and trauma recovery, chronic catabolic state, eating disorders and chemotherapy; cardiomyopathy; thrombocytopenia; growth retardation in connection with Crohn's disease; short bowel syndrome; irritable bowel syndrome; inflammatory bowel disease; Crohn's disease and ulcerative colitis; complications associated with transplantation; physiological short stature in growth hormone deficient children and short stature associated with chronic illness; obesity and growth retardation associated with obesity; anorexia associated with cachexia or aging; hypercortisolism and Cushing's syndrome; Paget's disease; osteoarthritis; osteochondrodysplasias; depression, nervousness, irritability and stress; reduced mental energy and low self-esteem; impaired cognitive function; dementia; Alzheimer's disease; short term memory loss; catabolism connected with pulmonary dysfunction and ventilator dependency; cardiac dysfunction associated with valvular disease, myocardial infarction, cardiac hypertrophy or congestive heart failure; high blood pressure; ventricular dysfunction or reperfusion events; conditions associated with chronic dialysis; catabolic state resulting from aging; protein catabolic responses following trauma; catabolic state associated with surgery, congestive heart failure, cardiac myopathy, burns, cancer or COPD); cachexia and protein loss due to chronic illness; hyperinsulinemia; nesidioblastosis; immunosuppression; wasting in connection with multiple sclerosis or other neurodegenerative disorders; low myelin repair; skin thinning; metabolic homeostasis and renal homeostasis; low osteoblast activity, bone remodeling or cartilage growth; insulin resistance; NIDDM; poor sleep quality; relative hyposomatotropism of senescence due to high increase in REM sleep and a decrease in REM latency; hypothermia; congestive heart failure; lipodystrophy; muscular atrophy; poor pulmonary function; sleep disorders; the catabolic state of prolonged critical illness; hirsutism, acne, seborrhea, androgenic alopecia, anemia, hyperpilosity, benign prostate hypertrophy, adenomas and neoplasies of the prostate; advanced metastatic prostate cancer; malignant tumor cells containing the androgen receptor, such as is the

case for breast, brain, skin, ovarian, bladder, lymphatic, liver and kidney cancers; cancers of the skin, pancreas, endometrium, lung and colon; osteosarcoma; hypercalcemia of malignancy; metastatic bone disease; reduced spermatogenesis; endometriosis and polycystic ovary syndrome; preeclampsia, eclampsia of pregnancy and preterm labor; premenstrual syndrome; vaginal dryness; age related decreased testosterone levels in men; male menopause; hypogonadism; low male hormone levels; male and female sexual dysfunction; erectile dysfunction; decreased sex drive; decreased libido; male and female contraception; hair loss and Reaven's Syndrome.

45. The method of claim 43, wherein the disease or disorder is selected from among acne, male-pattern baldness, wasting diseases, hirsutism, hypogonadism, osteoporoses, infertility, impotence and cancer.

46. The method of claim 45, wherein the cancer is prostate cancer.

47. The method of claim 46, wherein the cancer is androgen dependent prostate cancer.

48. The method of claim 43, wherein the subject has androgen independent prostate cancer.

49. The method of claim 46, wherein the compound reduces the number of androgen receptors in a cell.

50. A pharmaceutical composition, comprising:

a compound of any of claims 1-33; and

a pharmaceutical acceptable carrier.

51. The pharmaceutical composition of claim 50 for use in treating prostate cancer.

52. A use of a compound of any of claims 1-37 for the formulation of a medicament for the treatment of an androgen receptor mediated disease or disorder.

53. An article of manufacture, comprising:

packaging material;

a compound of any of claims 1-37 that is effective for modulating the activity of androgen receptor, or for treatment, prevention or amelioration of one or more symptoms of androgen receptor mediated diseases or disorders, or diseases or disorders in which androgen receptor activity is implicated, within the packaging material; and

a label that indicates that the compound or composition, or pharmaceutically acceptable derivative thereof, is used for modulating the activity of androgen receptor or for treatment, prevention or amelioration of one or more symptoms of androgen receptor mediated diseases or disorders, or diseases or disorders in which androgen receptor activity is implicated.