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Imidazo [1, 2-A] pyridine derivatives useful as peptide deformylase (PDF) inhibitors

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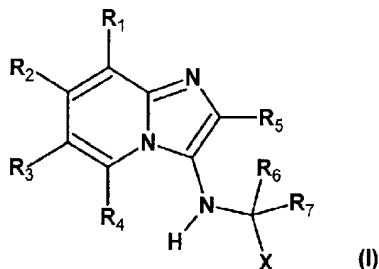
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(54) Title: IMIDAZO [1, 2-A] PYRIDINE DERIVATIVES USEFUL AS PEPTIDE DEFORMYLASE (PDF) INHIBITORS



(57) Abstract: The present invention relates to compounds of formula (I). These compounds are a novel type of peptide deformylase (PDF) inhibitors, and are therefore of great interest especially as new antibiotics.

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IMIDAZO [1,2-A] PYRIDINE DERIVATIVES USEFUL  
AS PEPTIDE DEFORMYLASE (PDF) INHIBITORS

The present invention relates to new inhibitors of peptide deformylase (PDF). These compounds are of great interest in particular as antibiotics.

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Peptide deformylase is a bacterial metalloenzyme which contains iron. It is detectable in all bacteria and plays a vital role in bacterial metabolism. During protein synthesis, peptide deformylase catalyses the removal of the formyl group from the N-terminus of bacterial proteins. Without the enzyme, bacteria cannot produce any functioning proteins.

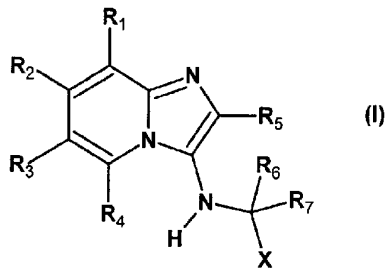
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Peptide deformylase is the point of application of a new class of antibiotics, which are called peptide deformylase inhibitors.

It is the aim of the present invention to prepare new inhibitors of peptide deformylase that are obtainable synthetically in a simple manner.

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The present invention relates to compounds of formula (I),



wherein

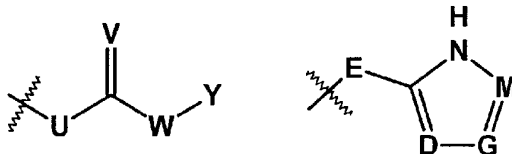
- 20 the radicals  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$ , independently of one another, are a hydrogen atom, a halogen atom, a hydroxy, amino, nitro or thiole group, an alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, alkylcycloalkyl, heteroalkylcycloalkyl, heterocycloalkyl, aralkyl or a heteroaralkyl radical, whereby all of these radicals may optionally be substituted, or two of the radicals  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  together may be part of
- 25 a cycloalkyl, heterocycloalkyl, aryl or heteroaryl ring, whereby each of these rings may optionally be substituted;

R<sup>5</sup> is a hydrogen atom, a halogen atom, a hydroxy, amino, nitro or thiole group, an alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, alkylcycloalkyl, heteroalkylcycloalkyl, heterocycloalkyl, aralkyl or heteroaralkyl radical;

- 5 the radicals R<sup>6</sup> and R<sup>7</sup>, independently of one another, are a hydrogen atom, or an alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, alkylcycloalkyl, heteroalkylcycloalkyl, heterocycloalkyl, aralkyl or heteroaralkyl radical; and

X is a group of formula -CS-NHOH, -CH<sub>2</sub>-CO-CH<sub>2</sub>-OH,

- 10 -CO-CH<sub>2</sub>-OH, -CO-NHOH, -CNH-NHOH, -CH<sub>2</sub>-NOH-CHS, -NOH-CHS, -NOH-CHO, -CH<sub>2</sub>-NOH-CHO, -CH<sub>2</sub>-CHOH-CHO, -CHOH-CHO, -CHOH-COOH, -CH(CH<sub>2</sub>-OH)-COOH, -COOH or -CH<sub>2</sub>COOH, or is selected from the following formulae:



- 15 whereby U is a bond, CH<sub>2</sub>, NH, O or S, V is O, S, NH or CH<sub>2</sub>, W is O, S, NH or CH<sub>2</sub>, and Y is OH or NH<sub>2</sub>, E is a bond, CH<sub>2</sub>, NH, O or S and the groups D, G and M, independently of one another, are N or CH,

or a pharmaceutically acceptable salt, solvate, hydrate or a pharmaceutically acceptable

- 20 formulation thereof.

The expression alkyl refers to a saturated, straight-chained or branched hydrocarbon group, which has in particular 1 to 20 carbon atoms, preferably 1 to 12 carbon atoms, most preferably 1 to 6 carbon atoms, e.g. the methyl, ethyl, propyl, isopropyl, n-butyl,

- 25 isobutyl, tert-butyl, n-hexyl, 2,2-dimethylbutyl or n-octyl group.

The expressions alkenyl and alkynyl refer to at least partly unsaturated, straight-chained or branched hydrocarbon groups, which have in particular 2 to 20 carbon atoms, preferably 2 to 12 carbon atoms, most preferably 2 to 6 carbon atoms, e.g. the ethenyl,

- 30 allyl, acetylenyl, propargyl, isoprenyl or hex-2-enyl group. Alkenyl groups preferably have one or two (most preferably one) double bond(s) and the alkynyl groups have one or two (most preferably one) triple bond(s).

In addition, the expressions alkyl, alkenyl and alkynyl refer to groups, in which e.g. one or more hydrogen atoms are replaced by a halogen atom (preferably F or Cl), -COOH, -OH, -SH, -NH<sub>2</sub>, -NO<sub>2</sub>, =O, =S, =NH, such as the 2,2,2-trichloroethyl or the trifluoromethyl group.

The expression heteroalkyl refers to an alkyl, alkenyl or alkynyl group, in which one or more (preferably 1, 2 or 3) carbon atoms are replaced by an oxygen, nitrogen, phosphorus, boron, selenium, silicon or sulfur atom (preferably oxygen, sulfur or nitrogen). The expression heteroalkyl refers furthermore to a carboxylic acid or a group derived from a carboxylic acid, such as acyl, acylalkyl, alkoxycarbonyl, acyloxy, acyloxyalkyl, carboxyalkylamide or alkoxycarbonyloxy.

Examples of heteroalkyl groups are groups of formulae R<sup>a</sup>-O-Y<sup>a</sup>, R<sup>a</sup>-S-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-Y<sup>a</sup>, R<sup>a</sup>-CO-Y<sup>a</sup>, R<sup>a</sup>-O-CO-Y<sup>a</sup>, R<sup>a</sup>-CO-O-Y<sup>a</sup>, R<sup>a</sup>-CO-N(R<sup>b</sup>)-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CO-Y<sup>a</sup>, R<sup>a</sup>-O-CO-N(R<sup>b</sup>)-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CO-O-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CO-N(R<sup>c</sup>)-Y<sup>a</sup>, R<sup>a</sup>-O-CO-O-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-C(=NR<sup>d</sup>)-N(R<sup>e</sup>)-Y<sup>a</sup>, R<sup>a</sup>-CS-Y<sup>a</sup>, R<sup>a</sup>-O-CS-Y<sup>a</sup>, R<sup>a</sup>-CS-O-Y<sup>a</sup>, R<sup>a</sup>-CS-N(R<sup>b</sup>)-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CS-Y<sup>a</sup>, R<sup>a</sup>-O-CS-N(R<sup>b</sup>)-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CS-O-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CS-N(R<sup>c</sup>)-Y<sup>a</sup>, R<sup>a</sup>-O-CS-O-Y<sup>a</sup>, R<sup>a</sup>-S-CO-Y<sup>a</sup>, R<sup>a</sup>-CO-S-Y<sup>a</sup>, R<sup>a</sup>-S-CO-N(R<sup>b</sup>)-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CO-S-Y<sup>a</sup>, R<sup>a</sup>-S-CO-O-Y<sup>a</sup>, R<sup>a</sup>-O-CO-S-Y<sup>a</sup>, R<sup>a</sup>-S-CO-S-Y<sup>a</sup>, R<sup>a</sup>-S-CS-Y<sup>a</sup>, R<sup>a</sup>-CS-S-Y<sup>a</sup>, R<sup>a</sup>-S-CS-N(R<sup>b</sup>)-Y<sup>a</sup>, R<sup>a</sup>-N(R<sup>b</sup>)-CS-S-Y<sup>a</sup>, R<sup>a</sup>-S-CS-O-Y<sup>a</sup>, R<sup>a</sup>-O-CS-S-Y<sup>a</sup>, where by R<sup>a</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub>-alkyl-, a C<sub>2</sub>-C<sub>6</sub>-alkenyl- or a C<sub>2</sub>-C<sub>6</sub>-alkynyl group; R<sup>b</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub>-alkyl-, a C<sub>2</sub>-C<sub>6</sub>-alkenyl- or a C<sub>2</sub>-C<sub>6</sub>-alkynyl group; R<sup>c</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub>-alkyl-, a C<sub>2</sub>-C<sub>6</sub>-alkenyl- or a C<sub>2</sub>-C<sub>6</sub>-alkynyl group; R<sup>d</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub>-alkyl-, a C<sub>2</sub>-C<sub>6</sub>-alkenyl- or a C<sub>2</sub>-C<sub>6</sub>-alkynyl group and Y<sup>a</sup> is a direct bond, a C<sub>1</sub>-C<sub>6</sub>-alkylene, a C<sub>2</sub>-C<sub>6</sub>-alkenylene or a C<sub>2</sub>-C<sub>6</sub>-alkynylene group, whereby each heteroalkyl group contains at least one carbon atom and one or more hydrogen atoms can be replaced by fluorine or chlorine atoms. Specific examples of heteroalkyl groups are methoxy, trifluoromethoxy, ethoxy, n-propyloxy, isopropyloxy, tert-butyloxy, methoxymethyl, ethoxymethyl, methoxyethyl, methylamino, ethylamino, dimethylamino, diethylamino, iso-propylethylamino, methyl-aminomethyl, ethylaminomethyl, di-iso-propylaminoethyl, enoether, dimethylaminomethyl, dimethylaminoethyl, acetyl, propionyl, butyryloxy, acetyloxy, methoxycarbonyl, ethoxy-carbonyl, N-ethyl-N-methylcarbamoyl or N-methylcarbamoyl. Further examples of heteroalkyl groups are nitrile, isonitrile, cyanate, thiocyanate, isocyanate, isothiocyanate and alkylnitrile groups.

The expression cycloalkyl refers to a saturated or partially unsaturated (e.g. cycloalkenyl) cyclic group, which contains one or more rings (preferably 1 or 2), with in particular 3 to 14 ring carbon atoms, preferably 3 to 10 (especially 3, 4, 5, 6 or 7) ring carbon atoms.

The expression cycloalkyl further refers to groups in which one or more hydrogen atoms are replaced by fluorine, chlorine, bromine or iodine atoms or -COOH, -OH, =O, -SH, =S, -NH<sub>2</sub>, =NH or -NO<sub>2</sub> groups, that is, for example, cyclic ketones such as cyclohexanone, 2-cyclohexenone or cyclopentanone. Further specific examples of cycloalkyl groups are the cyclopropyl, cyclobutyl, cyclopentyl, spiro[4,5]decanyl, norbornyl, cyclohexyl, cyclopentenyl, cyclohexadienyl, decalanyl, cubanyl, bicyclo[4.3.0]nonyl, tetraline, cyclopentylcyclohexyl, fluorocyclohexyl or the cyclohex-2-enyl group.

The expression heterocycloalkyl refers to a cycloalkyl group as defined above, in which one or more (preferably 1, 2 or 3) ring carbon atoms are replaced by an oxygen, nitrogen, silicon, selenium, phosphorus or sulfur atom (preferably oxygen, sulfur or nitrogen). A heterocycloalkyl group preferably possesses 1 or 2 rings with 3 to 10 (especially 3, 4, 5, 6 or 7) ring atoms. The expression heterocycloalkyl further refers to groups in which one or more hydrogen atoms are replaced by fluorine, chlorine, bromine or iodine atoms or -COOH, -OH, =O, -SH, =S, -NH<sub>2</sub>, =NH or -NO<sub>2</sub> groups. Examples are the piperidyl, morpholinyl, urotropinyl, pyrrolidinyl, tetrahydrothiophenyl, tetrahydropyranyl, tetrahydro-furyl, oxacyclopentyl, azacyclopentyl or 2-pyrazolyl group, as well as lactams, lactones, cyclic imides and cyclic anhydrides.

The expression alkylcycloalkyl refers to group which, in accordance with the above definitions, contain both cycloalkyl and alkyl, alkenyl or alkynyl groups, e.g. alkylcycloalkyl, alkylcycloalkenyl, alkenylcycloalkyl and alkynylcycloalkyl groups. An alkylcycloalkyl group preferably contains a cycloalkyl group which has one or two rings with 3 to 10 (especially 3, 4, 5, 6 or 7) ring carbon atoms, and one or two alkyl, alkenyl or alkynyl groups with 1 or 2 to 6 carbon atoms.

The expression heteroalkylcycloalkyl refers to alkylcycloalkyl groups as defined above, in which one or more (preferably 1, 2 or 3) ring carbon atoms and/or carbon atoms are replaced by an oxygen, nitrogen, silicon, selenium, phosphorus or sulfur atom (preferably oxygen, sulfur or nitrogen). A heteroalkylcycloalkyl group preferably possesses 1 or 2 rings with 3 to 10 (especially 3, 4, 5, 6 or 7) ring atoms and one or two alkyl, alkenyl, alkynyl or heteroalkyl groups with 1 or 2 to 6 carbon atoms. Examples of such groups are

alkylheterocycloalkyl, alkylheterocycloalkenyl, alkenylheterocycloalkyl, alkynylheterocycloalkyl, heteroalkylcycloalkyl, heteroalkylheterocycloalkyl and heteroalkylheterocycloalkenyl, whereby the cyclic groups are saturated or are mono-, di- or tri-unsaturated.

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The expression aryl or Ar refers to an aromatic group, which has one or more rings with in particular 6 to 14 ring carbon atoms, preferably 6 to 10 (especially 6) ring carbon atoms. The expression aryl (or Ar) further refers to groups in which one or more

10 hydrogen atoms are replaced by fluorine, chlorine, bromine or iodine atoms or -COOH, -OH, -SH, -NH<sub>2</sub>, or -NO<sub>2</sub> groups. Examples are the phenyl, naphthyl, biphenyl, 2-fluorophenyl, aniliny, 3-nitrophenyl or 4-hydroxyphenyl group.

The expression heteroaryl refers to an aromatic group which contains one or more rings with in particular 5 to 14 ring atoms, preferably 5 to 10 (especially 5 or 6) ring atoms, and

15 one or more (preferably 1, 2, 3 or 4) oxygen, nitrogen, phosphorus or sulfur ring atoms (preferably O, S or N). The expression heteroaryl further refers to groups in which one or more hydrogen atoms are replaced by fluorine, chlorine, bromine or iodine atoms or -COOH, -OH, -SH, -NH<sub>2</sub> or -NO<sub>2</sub> groups. Examples are 4-pyridyl, 2-imidazolyl, 3-phenylpyrrolyl, thiazolyl, oxazolyl, triazolyl, tetrazolyl, isoxazolyl, indazolyl, indolyl,

20 benzimidazolyl, pyridazinyl, quinoliny, puriny, carbazolyl, acridiny, pyrimidyl, 2,3'-bifuryl, 3-pyrazolyl and isoquinoliny groups.

The expression aralkyl refers to groups which, in accordance with the above definitions, contain both aryl and alkyl, alkenyl, alkynyl and/or cycloalkyl groups, such as arylalkyl,

25 alkylaryl, arylalkenyl, arylalkynyl, arylcycloalkyl, arylcycloalkenyl, alkylarylcycloalkyl and alkylarylcycloalkenyl groups. Specific examples of aralkyls are toluene, xylene, mesitylene, styrene, benzyl chloride, o-fluorotoluene, 1H-indene, tetraline, dihydronaphthalene, indanone, phenylcyclopentyl, cumene, cyclohexylphenyl, fluorene and indane. An aralkyl group preferably contains one or two aromatic rings with 6 to 10

30 ring carbon atoms and one or two alkyl, alkenyl and/or alkynyl groups with 1 or 2 to 6 carbon atoms and/or a cycloalkyl group with 5 or 6 ring carbon atoms.

The expression heteroaralkyl refers to an aralkyl group as defined above, in which one or more (preferably 1, 2, 3 or 4) ring carbon atoms and/or carbon atoms are replaced by an

35 oxygen, nitrogen, silicon, selenium, phosphorus, boron or sulfur atom (preferably oxygen, sulfur or nitrogen), i.e. it refers to groups which, in accordance with the above definitions,

contain both aryl or heteroaryl, and alkyl, alkenyl, alkynyl and/or heteroalkyl and/or cycloalkyl and/or heterocycloalkyl groups. A heteroaralkyl group preferably contains one or two aromatic rings with 5 or 6 to 10 ring carbon atoms and one or two alkyl, alkenyl and/or alkynyl groups with 1 or 2 to 6 carbon atoms and/or a cycloalkyl group with 5 or 6 ring carbon atoms, whereby 1, 2, 3 or 4 of these carbon atoms are replaced by oxygen, sulfur or nitrogen atoms.

Examples are arylheteroalkyl, arylheterocycloalkyl, arylheterocycloalkenyl, arylalkylheterocycloalkyl, arylalkenylheterocycloalkyl, arylalkynylheterocycloalkyl, arylalkylheterocycloalkenyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, heteroarylheteroalkyl, heteroarylcycloalkyl, heteroarylcycloalkenyl, heteroarylheterocycloalkyl, heteroarylheterocycloalkenyl, heteroarylalkylcycloalkyl, heteroarylalkylheterocycloalkenyl, heteroarylheteroalkylcycloalkyl, heteroarylheteroalkylcycloalkenyl and heteroarylheteroalkylheterocycloalkyl groups, whereby the cyclic groups are saturated or are mono- di- or tri-unsaturated. Specific examples are the tetrahydroisoquinolyl, benzoyl, 2- or 3-ethylindolyl, 4-methylpyridino, 2-, 3- or 4-methoxyphenyl, 4-ethoxyphenyl, 2-, 3- or 4-carboxyphenylalkyl group.

The expressions cycloalkyl, heterocycloalkyl, alkylcyclo-alkyl, heteroalkylcycloalkyl, aryl, heteroaryl, aralkyl and heteroaralkyl further refer to groups in which one or more hydrogen atoms are replaced by fluorine, chlorine, bromine or iodine atoms or OH, =O, SH, =S, NH<sub>2</sub>, =NH or NO<sub>2</sub> groups.

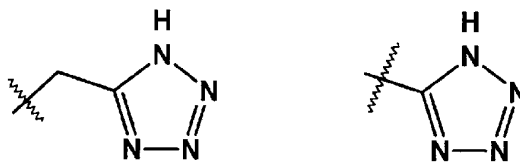
The expression "optionally substituted" refers to groups in which one or more hydrogen atoms are replaced e.g. by fluorine, chlorine, bromine or iodine atoms or -COOH, -OH, =O, -SH, =S, -NH<sub>2</sub>, =NH or -NO<sub>2</sub> groups. This expression further refers to groups that are substituted by unsubstituted C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>2</sub>-C<sub>9</sub> heterocycloalkyl, C<sub>6</sub>-C<sub>10</sub> aryl, C<sub>1</sub>-C<sub>9</sub> heteroaryl, C<sub>7</sub>-C<sub>12</sub> aralkyl or C<sub>2</sub>-C<sub>11</sub> heteroaralkyl groups.

Compounds of formula (I) may contain one or more centres of chirality depending on their substitution. The present invention therefore includes both all pure enantiomers and all pure diastereoisomers, and their mixtures in any ratio. In addition, the present invention also includes all cis/trans isomers of the compounds of the general formula (I) as well as mixtures thereof. In addition, the present invention includes all tautomeric forms of the compounds of formula (I).

Preference is given to compounds of formula (I), whereby W is NH and V is O, S or NH,

Further preference is given to compounds of formula (I), whereby one, two or three of  
5 groups D, G and M are nitrogen atoms.

Particular preference is given to compounds of formula (I), whereby X is a group of  
formula -CH<sub>2</sub>-CO-NHOH, -CO-NHOH, -CH<sub>2</sub>-NOH-CHS, -NOH-CHS, -CH<sub>2</sub>-NOH-CHO,  
-NOH-CHO, -CH<sub>2</sub>-CO-CH<sub>2</sub>OH, -CO-CH<sub>2</sub>OH, -CH<sub>2</sub>-CHOH-CHO, -CHOH-CHO or a group  
10 having one of the following formulae:



X is most preferably a group of formula -CO-NHOH.

15 In addition, R<sup>1</sup> is preferably a hydrogen atom, a chlorine atom, a bromine atom, an amino group, a methyl group or an ethyl group; especially a hydrogen atom or an amino group.

R<sup>2</sup> is more preferably a hydrogen atom, a chlorine atom, a bromine atom, a methyl group or an ethyl group; especially a hydrogen atom.

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Furthermore, R<sup>3</sup> and R<sup>4</sup> are preferably not hydrogen atoms at the same time.

R<sup>3</sup> is more preferably a hydrogen atom, a chlorine atom, a bromine atom, an amino group, a methyl group, an ethyl group or a propyl group, especially a chlorine atom, a  
25 bromine atom or an amino group.

R<sup>4</sup> is, in turn, preferably a chlorine atom, a bromine atom, a methyl group, an ethyl group or a propyl group; especially a chlorine atom or a bromine atom.

30 Compounds of formula (I), in which R<sup>3</sup> is a bromine atom and R<sup>4</sup> is a methyl group, or in which R<sup>3</sup> is a hydrogen atom and R<sup>4</sup> is a chlorine atom or a bromine atom, are especially preferred.

More preferably, two of radicals  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  together are part of a cycloalkyl, heterocycloalkyl, aryl or heteroaryl ring, whereby each of these rings may optionally be substituted.

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$R^5$  is, in turn, preferably a tert.-butyl group, an isopropyl group, a neopentyl group or a n-hexyl group; especially a tert.-butyl, neopentyl or n-hexyl group.

More preferably, the groups  $R^6$  and  $R^7$ , independently of one another, are hydrogen atoms, hydroxymethyl or methyl groups.

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Examples of pharmacologically acceptable salts of compounds of formula (I) are salts of physiologically acceptable mineral acids, such as hydrochloric acid, sulfuric acid and phosphoric acid; or salts of organic acids, such as methanesulfonic acid, p-toluene-sulfonic acid, lactic acid, formic acid, acetic acid, trifluoroacetic acid, citric acid, succinic acid, fumaric acid, maleic acid and salicylic acid. Compounds of formula (I) may be solvated, in particular hydrated. Hydration may arise e.g. during the preparation process or as a consequence of the hygroscopic nature of the initially water-free compounds of formula (I).

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The pharmaceutical compositions according to the present invention contain at least one compound of formula (I) as active ingredient and optionally carriers and/or adjuvants.

The prodrugs (for definition and examples see e.g. R. B. Silverman, Medizinische Chemie, VCH Weinheim, 1995, chapter 8, pp 361ff), which are likewise an object of the present invention, contain a compound of formula (I) and at least one pharmacologically acceptable protecting group, which is cleaved under physiological conditions, e.g. a hydroxy, alkoxy, aralkyloxy, acyl or acyloxy group, such as a methoxy, ethoxy, benzyloxy, acetyl or acetyloxy group.

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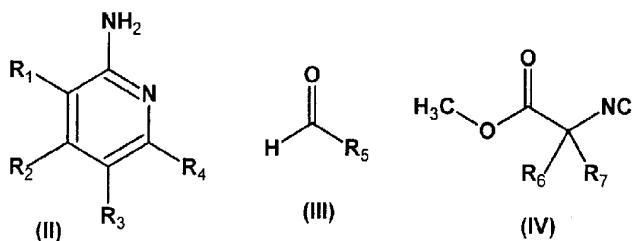
The therapeutical usage of the compounds of formula (I), their pharmacologically acceptable salts or solvates and hydrates, as well as formulations and pharmaceutical compositions, is likewise an object of the present invention.

Compounds of formula (I) are of great interest especially as inhibitors of metalloproteinases (in particular PDF). The usage of these active ingredients in the

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- production of medicaments to prevent and/or treat diseases, especially those conveyed by PDF, is also an object of the present invention. In general, compounds of formula (I) are administered using known, acceptable methods, either singly or in combination with any other therapeutic agent. Administration may be effected e.g. in one of the following
- 5 ways: orally, e.g. as dragées, coated tablets, pills, semi-solids, soft or hard capsules, solutions, emulsions or suspensions; parenterally, e.g. as an injectable solution; rectally as suppositories; by inhalation, e.g. as a powder formulation or spray, transdermally or intra-nasally. To produce such tablets, pills, semi-solids, coated tablets, dragées and hard gelatin capsules, the therapeutically employable product may be mixed with
- 10 pharmacologically inert, inorganic or organic carriers for medicaments, e.g. with lactose, sucrose, glucose, gelatin, malt, silica gel, starch or derivatives thereof, talc, stearic acid or salts thereof, dry skimmed milk and the like. To produce soft capsules, carriers for medicaments, such as vegetable oils, petroleum, animal or synthetic oils, wax, fat, polyols, may be used. To produce liquid solutions and syrups, carriers for medicaments,
- 15 such as water, alcohols, aqueous salt solution, aqueous dextrose, polyols, glycerol, vegetable oils, petroleum, animal or synthetic oils, may be used. For suppositories, carriers for medicaments, such as vegetable oils, petroleum, animal or synthetic oils, wax, fat and polyols, may be used. For aerosol formulations, compressed gases that are appropriate for this purpose may be used, such as oxygen, nitrogen and carbon dioxide.
- 20 The pharmaceutically acceptable agents may also contain preserving and stabilizing additives, emulsifiers, sweeteners, aromatics, salts to modify the osmotic pressure, buffers, coating additives and antioxidants.

- Compounds of formula (I) with X = -COOCH<sub>3</sub> may be produced by reacting compounds
- 25 of formulae (II), (III) and (IV), in which the radicals are defined as above.



By reacting the reaction product with hydroxylamine in methanol, compounds of formula (I) with X = -CO-NHOH may be produced.

### Examples

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General procedure:

50  $\mu$ l of a 0.2 M solution of amine (II) in methanol were dispensed onto a 96-well plate (amines that are insoluble in methanol were dispensed manually). 50  $\mu$ l of a 0.2 M solution of the aldehyde (III) in methanol were added. The plate was shaken for 2 h at room temperature. Subsequently, 50  $\mu$ l of a 0.2 M solution of the isocyanide (IV) in methanol and 50  $\mu$ l of a 0.4 M acetic acid solution in methanol were dispensed. The plate was shaken over night at room temperature, the solvent evaporated, and the residue dissolved in 150  $\mu$ l of a 0.5 M  $\text{NH}_2\text{OH}$  solution in methanol. The plate was again shaken over night at room temperature.

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The following compounds were produced in accordance with the general procedure, using appropriate starting materials, and were identified by mass spectrometry. All compounds were investigated for their activity as PDF inhibitors (for the assay, see D. Chen *et al.* Antimicrobial Agents and Chemotherapy, Jan. 2004, pp. 250-261) and had

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$\text{IC}_{50}$  values ranging between 1 nmol and 50  $\mu$ mol.

Example	calc. [M+H]	found [M+H]
2-(6-fluoro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	225.09	225.08
2-(6-bromo-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	299.03	299.04
2-(6-bromo-2,5-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	313.05	313.08
N-hydroxy-2-(6-iodo-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	389.07	389.10
2-(6-bromo-2,5-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	327.07	327.10
2-(2-tert-butyl-6-iodo-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	389.07	389.11

2-(6-bromo-2-ethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	327.07	327.10
2-(6-chloro-2-cyclopropyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	295.12	295.14
2-(6-chloro-2-isopropyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	297.14	297.18
2-(6-bromo-2-ethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	341.09	341.12
2-(6-bromo-2-isopropyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	341.09	341.12
2-[6-bromo-5-methyl-2-((E)-propenyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	339.07	339.11
2-(6-chloro-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	297.14	297.17
2-(2-tert-butyl-6-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	297.14	297.16
2-(2-tert-butyl-6-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	311.16	311.23
2-(2-tert-butyl-6-fluoro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	281.17	281.15
2-(6-fluoro-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	281.17	281.19
N-hydroxy-2-(2-isobutyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	277.20	277.21
2-(6-bromo-5-methyl-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	341.09	341.12
2-(6-bromo-2-isobutyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.11	355.14
2-(2-tert-butyl-6-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.20
N-hydroxy-2-(6-iodo-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-propionamide	403.09	403.12
2-(6-bromo-8-methyl-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	355.11	355.08
2-(6-bromo-2-tert-butyl-5-methyl-imidazo[1,2-a]pyridin-3-	355.11	355.13

ylamino)-N-hydroxy-acetamide		
2-(6-chloro-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	297.14	297.16
2-(2-tert-butyl-6-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	291.22	291.22
2-(6-chloro-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	311.16	311.17
2-(6-bromo-5-methyl-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	355.11	355.13
2-(6-bromo-2-tert-butyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	369.13	369.16
2-(6-bromo-2-isobutyl-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	369.13	369.15
2-(6-bromo-2-isobutyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	369.13	369.15
N-hydroxy-2-(2-hydroxymethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	251.14	251.15
2-(5-ethyl-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	265.16	265.17
2-(5-ethyl-2-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	249.16	249.17
N-hydroxy-2-[2-(1H-imidazol-2-yl)-5-methyl-imidazo[1,2-a]pyridin-3-ylamino]-acetamide	287.15	287.16
2-(2,5-diethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	263.18	263.19
2-[5-ethyl-2-(1H-imidazol-2-yl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	301.16	301.18
2-(5-ethyl-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-propionamide	279.17	279.26
2-[5-ethyl-2-((E)-propenyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	275.18	0.00
2-[7-ethyl-2-(1H-imidazol-2-yl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	301.16	301.18
2-(2-furan-2-yl)-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	287.13	287.15

N-hydroxy-2-[8-methyl-2-(1H-pyrazol-3-yl)-imidazo[1,2-a]pyridin-3-ylamino]-acetamide	287.15	287.16
2-(2-cyclopropyl-5-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	275.18	275.18
N-hydroxy-2-(8-hydroxy-2-methyl-imidazo[1,2-a]pyridin-3-ylamino)-3-phenyl-propionamide	327.17	327.10
N-hydroxy-2-(5-methyl-2-phenyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	297.16	297.17
N-hydroxy-2-(7-methyl-imidazo[1,2-a]pyridin-3-ylamino)-3-phenyl-propionamide	311.18	311.15
2-(2-butyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.24	305.22
2-(2-ethyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.19
N-hydroxy-2-(2-isobutyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	305.24	305.14
N-hydroxy-2-(2-hydroxymethyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	279.17	279.17
2-(2-benzyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	339.22	339.22
N-hydroxy-2-(2-pentyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	319.26	319.25
N-hydroxy-2-(2-methyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	263.18	263.17
3-[3-(hydroxycarbonylmethyl-amino)-5-propyl-imidazo[1,2-a]pyridin-2-yl]-propionic acid	321.19	321.18
2-(2,5-dipropyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	291.22	291.21
N-hydroxy-2-[2-(2-methylsulfanyl-ethyl)-5-propyl-imidazo[1,2-a]pyridin-3-ylamino]-acetamide	323.19	323.18
2-(2-tert-butyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.24	305.22
2-[2-(2,2-dimethyl-propyl)-5-propyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	319.26	319.25
2-(2-hept-1-ynyl-5-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-	343.26	343.25

hydroxy-acetamide		
N-hydroxy-2-(2-pentyl-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	345.18	345.20
2-[2-(2,2-dimethyl-propyl)-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	345.18	345.20
2-(2-hept-1-ynyl-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	369.18	369.11
2-(6-fluoro-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	295.19	295.20
2-[2-(2,2-dimethyl-propyl)-6-fluoro-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	295.19	295.19
2-(2-butyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.19
2-(2-benzyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	311.18	311.19
N-hydroxy-2-(5-methyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	291.22	291.22
N-hydroxy-2-[5-methyl-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-acetamide	295.15	295.09
2-(2-tert-butyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.21
2-[2-(2,2-dimethyl-propyl)-5-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	291.22	291.22
2-(2-hept-1-ynyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	315.22	315.23
2-(2-butyl-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	313.20	313.21
2-(2-benzyl-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	347.18	347.20
N-hydroxy-2-(2-pentyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	327.22	327.23
N-hydroxy-2-(2-propyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	299.18	299.21
N-hydroxy-2-[2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]quinolin-1-ylamino]-acetamide	331.15	331.18

2-(2-tert-butyl-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	313.20	313.21
2-[2-(2,2-dimethyl-propyl)-imidazo[1,2-a]quinolin-1-ylamino]-N-hydroxy-acetamide	327.22	327.23
2-(2-hept-1-ynyl-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	351.22	351.23
2-(6-bromo-2-isobutyl-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.11	355.03
2-[6-bromo-2-(2,2-dimethyl-propyl)-8-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	369.13	369.15
2-(6-bromo-2-hept-1-ynyl-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	393.13	393.14
2-(6-chloro-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	311.16	311.17
2-[6-chloro-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	311.16	311.17
2-(6-chloro-2-hept-1-ynyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	335.16	335.17
2-(2-butyl-6-nitro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	308.16	308.15
N-hydroxy-2-(2-isobutyl-6-nitro-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	308.16	308.11
2-(2-benzyl-6-nitro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	342.14	342.17
N-hydroxy-2-(6-nitro-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	322.18	322.19
2-[2-(2,2-dimethyl-propyl)-6-nitro-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	322.18	322.20
2-(2-hept-1-ynyl-6-nitro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	346.18	346.20
2-(2-butyl-6-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.18
N-hydroxy-2-(6-methyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	291.22	291.22
2-[2-(2,2-dimethyl-propyl)-6-methyl-imidazo[1,2-a]pyridin-3-	291.22	291.22

ylamino]-N-hydroxy-acetamide		
2-(2-hept-1-ynyl-6-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	315.22	315.22
2-(2-butyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	291.22	291.23
N-hydroxy-2-(2-isobutyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	291.22	291.21
N-hydroxy-2-(2-hydroxymethyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	265.16	265.16
2-(2-benzyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	325.20	325.21
2-(5,7-dimethyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.24	305.24
3-[3-(hydroxycarbonylmethyl-amino)-5,7-dimethyl-imidazo[1,2-a]pyridin-2-yl]-propionic acid	307.17	307.10
2-(5,7-dimethyl-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.26
2-[5,7-dimethyl-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	309.17	309.18
2-(2-tert-butyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	291.22	291.22
2-[2-(2,2-dimethyl-propyl)-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	305.24	305.24
2-(2-hept-1-ynyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	329.24	329.24
2-(6,8-dibromo-2-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	419.00	419.03
2-(6,8-dibromo-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	419.00	419.03
2-(6,8-dibromo-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	392.93	393.00
2-(2-benzyl-6,8-dibromo-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	452.97	453.02
2-(6,8-dibromo-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	433.02	433.05

2-[6,8-dibromo-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	436.95	436.97
2-[6,8-dibromo-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	433.02	433.02
2-(6,8-dibromo-2-hept-1-ynyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	457.01	457.03
2-(2-butyl-8-chloro-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	365.12	365.14
2-(8-chloro-2-hydroxymethyl-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	339.06	339.03
2-(2-benzyl-8-chloro-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	399.10	399.15
2-(8-chloro-2-pentyl-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	379.14	379.15
2-[8-chloro-2-(2,2-dimethyl-propyl)-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	379.14	379.15
2-(8-chloro-2-hept-1-ynyl-6-trifluoromethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	403.14	403.14
2-(6-bromo-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	341.09	341.09
2-(6-bromo-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.11	355.10
2-(6-bromo-2-tert-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	341.09	341.09
2-[6-bromo-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	355.11	355.11
2-(6-bromo-2-hept-1-ynyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	379.11	379.12
2-(2-butyl-9-hydroxy-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	329.19	329.19
2-(2-ethyl-9-hydroxy-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	301.15	301.16
N-hydroxy-2-(9-hydroxy-2-isobutyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	329.19	329.19
2-(2-benzyl-9-hydroxy-imidazo[1,2-a]quinolin-1-ylamino)-N-	363.17	363.18

hydroxy-acetamide		
N-hydroxy-2-(9-hydroxy-2-pentyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	343.21	343.21
N-hydroxy-2-(9-hydroxy-2-propyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	315.17	315.17
N-hydroxy-2-[9-hydroxy-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]quinolin-1-ylamino]-acetamide	347.14	347.15
2-(2-tert-butyl-9-hydroxy-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	329.19	329.19
2-[2-(2,2-dimethyl-propyl)-9-hydroxy-imidazo[1,2-a]quinolin-1-ylamino]-N-hydroxy-acetamide	343.21	343.21
2-(8-bromo-2-butyl-6-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.11	355.11
2-(8-bromo-6-methyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	369.13	369.12
2-[8-bromo-2-(2,2-dimethyl-propyl)-6-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	369.13	369.12
2-(8-bromo-2-hept-1-ynyl-6-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	393.13	393.13
2-(2-butyl-5-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	297.14	297.14
2-(5-chloro-2-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	269.10	269.14
2-(5-chloro-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	297.14	297.14
2-(5-chloro-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	271.07	271.09
2-(2-benzyl-5-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	331.12	331.13
2-(5-chloro-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	311.16	311.16
2-(5-chloro-2-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	255.08	255.09
3-[5-chloro-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridin-2-yl]-propionic acid	313.09	313.13

2-(5-chloro-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	283.12	283.18
2-[5-chloro-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	315.09	315.10
2-(2-tert-butyl-5-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	297.14	297.14
2-[5-chloro-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	311.16	311.16
2-(5-chloro-2-hept-1-ynyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	335.16	335.17
N-hydroxy-2-(5-methyl-6-nitro-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	308.16	308.14
2-[2-(2,2-dimethyl-propyl)-5-methyl-6-nitro-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	336.20	336.25
2-(5-bromo-2-propyl-imidazo[1,2-b]isoquinolin-3-ylamino)-N-hydroxy-acetamide	377.09	377.13
2-[5-bromo-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-b]isoquinolin-3-ylamino]-N-hydroxy-acetamide	409.06	409.08
2-(6,8-dibromo-2-butyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	433.02	433.05
2-(6,8-dibromo-2-ethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	404.98	405.00
2-(6,8-dibromo-2-isobutyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	433.02	433.03
2-(6,8-dibromo-2-hydroxymethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	406.95	406.98
2-(2-benzyl-6,8-dibromo-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	466.99	466.96
2-(6,8-dibromo-5-methyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	447.03	447.04
2-(6,8-dibromo-2,5-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	390.96	390.98
2-(6,8-dibromo-5-methyl-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	419.00	419.01
2-[6,8-dibromo-5-methyl-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-	450.97	451.02

a]pyridin-3-ylamino]-N-hydroxy-acetamide		
2-[6,8-dibromo-2-(2,2-dimethyl-propyl)-5-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	447.03	447.05
2-(6,8-dibromo-2-hept-1-ynyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	471.03	471.08
2-(2-butyl-5-hydroxy-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	329.19	329.20
N-hydroxy-2-(5-hydroxy-2-isobutyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	329.19	329.20
2-(2-benzyl-5-hydroxy-imidazo[1,2-a]quinolin-1-ylamino)-N-hydroxy-acetamide	363.17	363.17
N-hydroxy-2-(5-hydroxy-2-pentyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	343.21	343.19
N-hydroxy-2-(5-hydroxy-2-propyl-imidazo[1,2-a]quinolin-1-ylamino)-acetamide	315.17	315.23
N-hydroxy-2-[5-hydroxy-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]quinolin-1-ylamino]-acetamide	347.14	347.15
2-[2-(2,2-dimethyl-propyl)-5-hydroxy-imidazo[1,2-a]quinolin-1-ylamino]-N-hydroxy-acetamide	343.21	343.21
2-(2-butyl-6,8-difluoro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	299.16	299.16
2-(6,8-difluoro-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	299.16	299.16
2-(6,8-difluoro-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	313.18	313.18
2-[6,8-difluoro-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	317.11	317.12
2-[2-(2,2-dimethyl-propyl)-6,8-difluoro-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	313.18	313.18
2-(6-bromo-2-isobutyl-7,8-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	369.13	369.13
2-(6-bromo-7,8-dimethyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	383.15	383.14
2-[6-bromo-2-(2,2-dimethyl-propyl)-7,8-dimethyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	383.15	383.14

2-(5-bromo-2-hept-1-ynyl-7,8-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	407.15	407.15
2-[2-(2,2-dimethyl-propyl)-7-methyl-6-nitro-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	336.20	336.21
2-(5-bromo-2-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	341.09	341.09
2-(5-bromo-2-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	313.05	313.06
2-(5-bromo-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	341.09	341.10
2-(5-bromo-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	315.02	315.04
2-(2-benzyl-5-bromo-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	375.07	374.98
2-(5-bromo-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.11	355.06
2-(5-bromo-2-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	299.03	299.04
3-[5-bromo-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridin-2-yl]-propionic acid	357.04	357.06
2-(5-bromo-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	327.07	327.07
2-[5-bromo-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	359.04	359.06
2-(5-bromo-2-tert-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	341.09	341.17
2-[5-bromo-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	355.11	355.11
2-(5-bromo-2-hept-1-ynyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	379.11	379.12
2-(2-butyl-8-ethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.24	305.23
2-(8-ethyl-2-hydroxymethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	279.17	279.18
2-(2-benzyl-8-ethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-	339.22	339.22

N-hydroxy-acetamide		
2-(8-ethyl-5-methyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	319.26	319.25
2-[2-(2,2-dimethyl-propyl)-8-ethyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	319.26	319.25
2-(8-ethyl-2-hept-1-ynyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	343.26	343.26
2-(6,8-dichloro-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.03	305.06
2-(6,8-dichloro-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	345.12	345.12
2-(6-bromo-2-isobutyl-7-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.11	355.11
2-[6-bromo-2-(2,2-dimethyl-propyl)-7-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	369.13	369.12
2-(2-butyl-5-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	291.22	291.22
2-(5-ethyl-2-isobutyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	291.22	291.21
2-(5-ethyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.24	305.23
3-[5-ethyl-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridin-2-yl]-propionic acid	307.17	307.17
2-(5-ethyl-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.19
2-[5-ethyl-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	309.17	309.18
2-(2-tert-butyl-5-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	291.22	291.22
2-[2-(2,2-dimethyl-propyl)-5-ethyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	305.24	305.24
2-(5-ethyl-2-hept-1-ynyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	329.24	329.24
2-(6-bromo-2-butyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.11	355.11

2-(2-benzyl-6-bromo-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	389.09	389.06
2-(6-bromo-5-methyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	369.13	369.13
3-[6-bromo-3-(hydroxycarbonylmethyl-amino)-5-methyl-imidazo[1,2-a]pyridin-2-yl]-propionic acid	371.06	371.10
2-[6-bromo-5-methyl-2-(2-methylsulfanyl-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	373.06	373.08
2-[6-bromo-2-(2,2-dimethyl-propyl)-5-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	369.13	369.14
2-(6-bromo-2-hept-1-ynyl-5-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	393.13	393.03
2-(2,7-bis-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	267.13	267.13
N-hydroxy-2-(7-hydroxymethyl-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	279.17	279.17
2-(2-tert-butyl-7-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	293.19	293.18
2-(2-cyclohexyl-7-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	319.21	319.20
2-butyl-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridine-6-carboxylic acid amide	306.19	306.18
3-(hydroxycarbonylmethyl-amino)-2-hydroxymethyl-imidazo[1,2-a]pyridine-6-carboxylic acid amide	280.12	280.14
2-tert-butyl-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridine-6-carboxylic acid amide	306.19	306.18
3-(hydroxycarbonylmethyl-amino)-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridine-6-carboxylic acid amide	346.13	346.15
2-cyclohexyl-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridine-6-carboxylic acid amide	332.21	332.20
2-(6,8-dibromo-2-butyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	447.03	447.05
2-(6,8-dibromo-2-ethyl-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	419.00	419.02
2-(2-benzyl-6,8-dibromo-5,7-dimethyl-imidazo[1,2-a]pyridin-3-	481.01	481.05

ylamino)-N-hydroxy-acetamide		
2-(6,8-dibromo-5,7-dimethyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	461.05	461.08
3-[6,8-dibromo-3-(hydroxycarbonylmethyl-amino)-5,7-dimethyl-imidazo[1,2-a]pyridin-2-yl]-propionic acid	462.98	463.01
2-[6,8-dibromo-2-(2,2-dimethyl-propyl)-5,7-dimethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	461.05	461.10
2-[6,8-dibromo-5,7-dimethyl-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	486.98	487.04
2-(8-bromo-6-chloro-2-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	347.01	347.10
2-[8-bromo-6-chloro-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	389.07	389.07
2-(8-bromo-6-chloro-2-cyclohexyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	401.07	401.08
2-(8-amino-2-butyl-6-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	312.15	312.16
2-(8-amino-6-chloro-2-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	284.11	284.12
2-(8-amino-6-chloro-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	286.09	286.02
2-(8-amino-2-benzyl-6-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	346.13	346.15
2-(8-amino-6-chloro-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	326.17	326.18
3-[8-amino-6-chloro-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridin-2-yl]-propionic acid	328.10	328.12
2-(8-amino-6-chloro-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	298.13	298.06
2-(8-amino-2-tert-butyl-6-chloro-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	312.15	312.16
2-[8-amino-6-chloro-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	326.17	326.18
2-[8-amino-6-chloro-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	352.10	352.05

2-(8-amino-6-chloro-2-cyclohexyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	338.17	338.18
2-(8-amino-6-bromo-2-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	356.10	356.12
2-(8-amino-6-bromo-2-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	328.06	328.08
2-(8-amino-6-bromo-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	330.04	330.06
2-(8-amino-2-benzyl-6-bromo-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	390.08	390.11
2-(8-amino-6-bromo-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	370.12	370.13
2-(8-amino-6-bromo-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	342.08	342.10
2-(8-amino-6-bromo-2-tert-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	356.10	356.11
2-[8-amino-6-bromo-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	370.12	370.13
2-[8-amino-6-bromo-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	396.04	396.05
2-[8-amino-6-bromo-2-(2,2,2-trifluoro-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	382.03	382.06
2-(8-amino-6-bromo-2-cyclohexyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	382.12	382.13
2-(6-amino-2-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	278.19	278.19
2-(6-amino-2-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	250.15	250.15
2-(6-amino-2-benzyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	312.17	312.25
2-(6-amino-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	292.21	292.20
3-[6-amino-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridin-2-yl]-propionic acid	294.14	294.15
2-(6-amino-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-	264.17	264.27

hydroxy-acetamide		
2-(6-amino-2-tert-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	278.19	278.18
2-[6-amino-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	292.21	292.20
2-[6-amino-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	318.14	318.15
2-[6-amino-2-(2,2,2-trifluoro-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	304.12	304.11
2-(6-amino-2-cyclohexyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	304.21	304.20
2-(8-amino-2-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	278.19	278.19
2-(8-amino-2-benzyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	312.17	312.18
2-(8-amino-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	292.21	292.20
2-(8-amino-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	264.17	264.20
2-(8-amino-2-tert-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	278.19	278.19
2-[8-amino-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	292.21	292.20
2-[8-amino-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	318.14	318.15
2-(5-amino-2-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	278.19	278.25
2-(5-amino-2-benzyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	312.17	312.19
2-(5-amino-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	292.21	292.20
2-(5-amino-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	264.17	264.17
2-(5-amino-2-tert-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	278.19	278.19

2-[5-amino-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	318.14	318.16
2-[5-amino-2-(2,2,2-trifluoro-ethyl)-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	304.12	304.10
2-(5-amino-2-cyclohexyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	304.21	304.21
2-(2-butyl-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	277.20	277.22
N-hydroxy-2-(2-hydroxymethyl-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	251.14	251.13
2-(2-benzyl-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	311.18	311.11
N-hydroxy-2-(8-methyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	291.22	291.21
2-[2-(2,2-dimethyl-propyl)-8-methyl-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	291.22	291.21
N-hydroxy-2-[8-methyl-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-acetamide	317.14	317.15
2-(2-cyclohexyl-8-methyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	303.22	303.21
2-(2-butyl-7-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	291.22	291.21
2-(7-ethyl-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	265.16	265.07
2-(2-benzyl-7-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	325.20	325.20
2-(7-ethyl-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.24	305.23
2-(2-cyclohexyl-7-ethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	317.24	317.23
2-(2-butyl-8-hydroxy-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	279.17	279.20
2-(2-ethyl-8-hydroxy-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	251.14	251.14
N-hydroxy-2-(8-hydroxy-2-hydroxymethyl-imidazo[1,2-a]pyridin-	253.11	253.12

3-ylamino)-acetamide		
2-(2-benzyl-8-hydroxy-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	313.15	313.17
N-hydroxy-2-(8-hydroxy-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	293.19	293.19
N-hydroxy-2-(8-hydroxy-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-acetamide	265.16	265.16
2-(2-tert-butyl-8-hydroxy-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	279.17	279.17
2-[2-(2,2-dimethyl-propyl)-8-hydroxy-imidazo[1,2-a]pyridin-3-ylamino]-N-hydroxy-acetamide	293.19	293.19
N-hydroxy-2-[8-hydroxy-2-(3,3,3-trifluoro-propyl)-imidazo[1,2-a]pyridin-3-ylamino]-acetamide	319.12	319.13
2-(2-cyclohexyl-8-hydroxy-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	305.19	305.19
2-(2-butyl-imidazo[2,1-a]isoquinolin-3-ylamino)-N-hydroxy-acetamide	313.20	313.20
2-(2-benzyl-imidazo[2,1-a]isoquinolin-3-ylamino)-N-hydroxy-acetamide	347.18	347.19
N-hydroxy-2-(2-pentyl-imidazo[2,1-a]isoquinolin-3-ylamino)-acetamide	327.22	327.22
2-[2-(2,2-dimethyl-propyl)-imidazo[2,1-a]isoquinolin-3-ylamino]-N-hydroxy-acetamide	327.22	327.22
2-(2-cyclohexyl-imidazo[2,1-a]isoquinolin-3-ylamino)-N-hydroxy-acetamide	339.22	339.21
2-(8-benzyloxy-2-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	369.23	369.23
2-(8-benzyloxy-2-hydroxymethyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	343.17	343.18
2-(8-benzyloxy-2-pentyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	383.25	383.23
2-(8-benzyloxy-2-propyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	355.21	355.22
2-(8-benzyloxy-2-tert-butyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	369.23	369.25

2006239548 01 Apr 2010

- 29 -

2-(8-benzyloxy-2-(2,2-dimethyl-propyl)-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	383.25	383.25
2-(8-benzyloxy-2-cyclohexyl-imidazo[1,2-a]pyridin-3-ylamino)-N-hydroxy-acetamide	395.25	395.25
3-(hydroxycarbonylmethyl-amino)-2-pentyl-imidazo[1,2-a]pyridine-6-carboxylic acid	321.19	321.14
2-butyl-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridine-8-carboxylic acid	307.17	307.20
3-(hydroxycarbonylmethyl-amino)-2-pentyl-imidazo[1,2-a]pyridine-8-carboxylic acid	321.19	321.17
2-(2,2-dimethyl-propyl)-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridine-8-carboxylic acid	321.19	321.19
2-cyclohexyl-3-(hydroxycarbonylmethyl-amino)-imidazo[1,2-a]pyridine-8-carboxylic acid	333.19	333.20

The reference in this specification to any prior publication (or information derived from it), or to any matter which is known, is not, and should not be taken as an acknowledgment or admission or any form of suggestion that that prior publication (or information derived from it) or known matter forms part of the common general knowledge in the field of endeavour to which this specification relates.

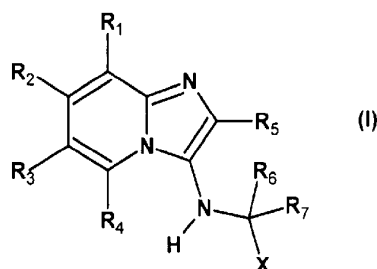
Throughout this specification and the claims which follow, unless the context requires otherwise, the word "comprise", and variations such as "comprises" and "comprising", will be understood to imply the inclusion of a stated integer or step or group of integers or steps but not the exclusion of any other integer or step or group of integers or steps.

15

20

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A compound of formula (I)



5

wherein

the radicals  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$ , independently of one another, are a hydrogen atom, a halogen atom, a hydroxy, amino, nitro or thiole group, an alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, alkylcycloalkyl, heteroalkylcycloalkyl, heterocycloalkyl, aralkyl or a heteroaralkyl radical, whereby all of these radicals may optionally be substituted, or two of the radicals  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  together may be part of a cycloalkyl, heterocycloalkyl, aryl or heteroaryl ring, whereby each of these rings may optionally be substituted;

10

15

$R^5$  is a hydrogen atom, a halogen atom, a hydroxy, amino, nitro or thiole group, an alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, alkylcycloalkyl, heteroalkylcycloalkyl, heterocycloalkyl, aralkyl or heteroaralkyl radical;

20

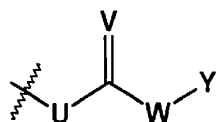
the radicals  $R^6$  and  $R^7$ , independently of one another, are a hydrogen atom, or an alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, alkylcycloalkyl, heteroalkylcycloalkyl, heterocycloalkyl, aralkyl or heteroaralkyl radical, whereby all these radicals may optionally be substituted; and

25

X is a group of formula  $-\text{CO}-\text{NHOH}$ ,  $-\text{NOH}-\text{CHO}$ ,  $-\text{CH}_2-\text{NOH}-\text{CHO}$ , or is selected from the following formulae:

2006239548 01 Apr 2010

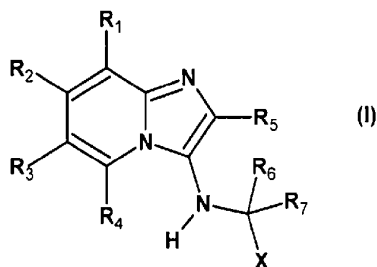
- 31 -



whereby U is a bond, CH<sub>2</sub>, NH, O or S, V is O, S, NH or CH<sub>2</sub>, W is O, S, NH or CH<sub>2</sub>, and Y is OH or NH<sub>2</sub>,

5 or a pharmaceutically acceptable salt, solvate, hydrate or a pharmaceutically acceptable formulation thereof.

2. A compound of formula (I)



10 wherein

the radicals R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup>, independently of one another, are a hydrogen atom, a halogen atom, a hydroxy, amino, nitro or thiole group, an alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, alkylcycloalkyl, heteroalkylcycloalkyl, heterocycloalkyl, aralkyl or a heteroaralkyl radical, whereby all of these radicals  
 15 may optionally be substituted, or two of the radicals R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> together may be part of a cycloalkyl, heterocycloalkyl, aryl or heteroaryl ring, whereby each of these rings may optionally be substituted;

20 R<sup>4</sup> is a chlorine atom, a bromine atom, a methyl group, an ethyl group or a propyl group;



2006239548 01 Apr 2010

- 33 -

6. A compound according to any one of claims 1, 2, 4 and 5, whereby R<sup>3</sup> and R<sup>4</sup> are not hydrogen atoms at the same time.
7. A compound according to any one of claims 1 to 6, whereby R<sup>3</sup> is a hydrogen atom, a chlorine atom, a bromine atom, an amino group, a methyl group, an ethyl group or a propyl group.
8. A compound according to any one of claims 1 to 7, in which R<sup>3</sup> is a bromine atom and R<sup>4</sup> is a methyl group, or in which R<sup>3</sup> is a hydrogen atom and R<sup>4</sup> is a chlorine atom or a bromine atom.
9. A compound according to any one of claims 1 to 8, in which R<sup>5</sup> is a tert-butyl group, an isopropyl group, a neopentyl group or an n-hexyl group.
10. A compound according to any one of claims 1 to 9, in which the groups R<sup>6</sup> and R<sup>7</sup>, independently of one another, are hydrogen atoms, hydroxymethyl groups or methyl groups.
11. A compound according to any one of claims 1 to 10, whereby X is a group of formula -CO-NH-OH.
12. A pharmaceutical composition comprising a compound according to any one of claims 1 to 11 and optionally carriers and/or adjuvants.
13. Use of a compound according to any one of claims 1 to 11 in the manufacture of a medicament for the treatment and/or prevention of diseases conveyed by metalloproteinase activity.
14. Use of a compound according to any one of claims 1 to 11 in the manufacture of a medicament for the treatment and/or prevention of diseases conveyed by peptide deformylase (PDF) activity.
15. Use of a compound according to any one of claims 1 to 11 in the manufacture of a medicament for use as an antibiotic.

2006239548 01 Apr 2010

- 34 -

16. A method of treating or preventing diseases conveyed by metalloproteinase activity comprising the step of administering to a subject a compound or pharmaceutical composition according to any one of claims 1 to 12.
- 5
17. A method of treating or preventing diseases conveyed by peptide deformylase (PDF) activity comprising the step of administering to a subject a compound or pharmaceutical composition according to any one of claims 1 to 12.
- 10
18. A method of treating or preventing a bacterial infection comprising the step of administering to a subject a compound or pharmaceutical composition according to any one of claims 1 to 12.
- 15
19. A compound according to any one of claims 1 to 11 substantially as hereinbefore described.