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C07K 16/18 (2006.01)

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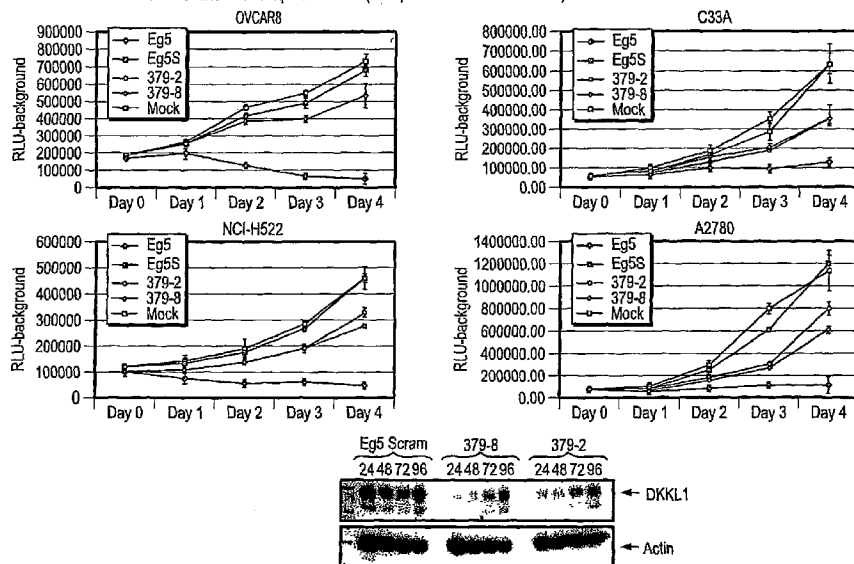
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DKKL-I SPLICE PRODUCT MODULATORS FOR CANCER DIAGNOSIS AND THERAPY

siRNA-anti-proliferation in Human Cancer Cell Lines Expressing DKKL1

- 100nM of siRNA was transfected to cells seeded at 10000 cells per well in a 48-well plate
- C33A cervical cancer cell line, A2780 ovarian cancer cell line and NCI-H522 cancer cell line express DKKL1 both at protein and mRNA (CT:24-28)
- OVCAR8 ovarian cancer cell line do not express DKKL1 (both protein and mRNA-CT:>35)



(57) Abstract: The present invention relates to novel sequences for use in detection, diagnosis and treatment of diseases, including cancer. The invention provides novel splice products of human DKKL-1 gene. The present invention provides methods of using polynucleotides having the novel splice products of the human DKKL-1 sequences, their corresponding gene products and modulators of the DKKL-1 splice products for the detection, diagnosis, prevention and/or treatment of associated cancers.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
INV. C07K14/47	C07K16/18	C12N15/11 A61K39/395 G01N33/53
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) C07K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, BIOSIS, WPI Data, PAJ, EMBASE, Sequence Search		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/66041 A (HUMAN GENOME SCIENCES INC [US]; RUBEN STEVEN M [US]; NI JIAN [US]; ROS) 23 December 1999 (1999-12-23) page 119 - page 121; sequence 187 -& DATABASE GENESEQ 19 April 2000 (2000-04-19), "Human secreted protein HTGLFG05, SEQ ID NO 187" XP002410888 Database accession no. AAY86272 abstract	1-72
X	WO 99/31236 A2 (GENSET SA [FR]; BOUGUELERET LYDIE [FR]; DUCLERT AYMERIC [FR]; DUMAS MI) 24 June 1999 (1999-06-24) claim 20; sequence 219 -/--	1-25
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed		*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
Date of the actual completion of the international search 16 April 2007		Date of mailing of the international search report 07/05/2007
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Weikl, Martina

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International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	-& DATABASE GENESEQ 13 September 1999 (1999-09-13), "Extended human secreted protein sequence, SEQ ID NO 219" XP002410889 Database accession no. AAY35970 abstract -----	
X	WO 03/050245 A2 (CURAGEN CORP [US]; ALSOBROOK JOHN P II [US]; ANDERSON DAVID W [US]; BO) 19 June 2003 (2003-06-19) page 171 - page 175; sequence 88 -& DATABASE GENESEQ 12 February 2004 (2004-02-12), "Human NOVX13b protein" XP002410890 Database accession no. ADE95556 abstract -----	1-72
X	WO 2004/007527 A (INCYTE CORP [US]; KABLE AMY E [US]; SWARNAKAR ANITA [US]; LEE SOO YEUN) 22 January 2004 (2004-01-22) table 2; sequence 53 -& DATABASE GENESEQ 6 May 2004 (2004-05-06), "Human secreted protein (SECP) #53" XP002410891 Database accession no. ADJ67027 abstract -----	1-72
A	WO 00/52047 A2 (MILLENNIUM PHARM INC [US]) 8 September 2000 (2000-09-08) pages 96,111 -----	1-72
X	DATABASE EBI Human SGY-1 PCR primer SEQ ID 72 1 January 2004 (2004-01-01), XP002410984 Database accession no. ADD13159 abstract -----	19,20, 23-25
A	DATABASE UniProt 21 February 2001 (2001-02-21), "Dickkopf-like protein 1 precursor (Soggy-1 protein) (SGY-1)" XP002410892 abstract -----	1-72
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INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KRUPNIK V E ET AL: "Functional and structural diversity of the human Dickkopf gene family" GENE, ELSEVIER, AMSTERDAM, NL, vol. 238, no. 2, 1 October 1999 (1999-10-01), pages 301-313, XP002140768 ISSN: 0378-1119 the whole document -----	1-72
P, X	WO 2005/033343 A (CHIRON CORP [US]; LAI ALBERT [US]) 14 April 2005 (2005-04-14) the whole document -----	1-72

INTERNATIONAL SEARCH REPORT

International application No.
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 26-50 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition. The same applies to claims 65-67 insofar as these claims are directed to in vivo processes.
2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/US2006 /011761

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-72 (partially)

claims relating to DKKL-1 isoform 2

2. claims: 1-72 (partially)

claims relating to DKKL-1 isoform 3

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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