



(11) **EP 2 365 081 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**18.07.2012 Bulletin 2012/29**

(43) Date of publication A2:  
**14.09.2011 Bulletin 2011/37**

(21) Application number: **10185550.0**

(22) Date of filing: **12.04.2000**

(51) Int Cl.:  
**C12N 15/12** (2006.01) **C07K 14/705** (2006.01)  
**C07K 16/28** (2006.01) **C12Q 1/68** (2006.01)  
**G01N 33/68** (2006.01) **A61P 13/08** (2006.01)  
**A61K 38/17** (2006.01) **A61K 39/395** (2006.01)  
**A01K 67/027** (2006.01) **C07K 16/30** (2006.01)

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**

(30) Priority: **12.04.1999 US 128858 P**

(62) Document number(s) of the earlier application(s) in  
accordance with Art. 76 EPC:  
**06120391.5 / 1 792 989  
00922200.1 / 1 171 595**

(71) Applicant: **Agensys, Inc.**  
**Santa Monica, CA 90404 (US)**

(72) Inventors:  
• **Afar, Daniel E.**  
**Pacific Palisades, CA 90272 (US)**

- **Hubert, Rene S.**  
**Los Angeles, CA 90026 (US)**
- **Leong, Kahan**  
**Playa del Rey, CA 90293 (US)**
- **Raitano, Arthur B.**  
**Los Angeles, CA 90066 (US)**
- **Saffran, Douglas C.**  
**Los Angeles, CA 90049 (US)**

(74) Representative: **Read, David Graham**  
**W. P. Thompson & Co.**  
**Coopers Building**  
**Church Street**  
**Liverpool L1 3AB (GB)**

(54) **13 Transmembrane protein expressed in prostate cancer**

(57) A prostate tumor associated gene (designated 24P4C12) and its encoded protein is described. 24P4C12 is highly expressed in prostate tissue xenografts, providing evidence that it is turned on in at least

some prostate cancers. 24P4C12 provides a diagnostic and/or therapeutic target for prostate and other cancers

**EP 2 365 081 A3**



EUROPEAN SEARCH REPORT

Application Number  
EP 10 18 5550

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	WO 99/06548 A (LACROIX BRUNO ;DUCLERT AYMERIC (FR); GENSET (FR); DUMAS MILNE EDWA) 11 February 1999 (1999-02-11) * page 7, line 14 - line 20; claims 27,28; examples 17, 19,25-30,43,51; sequences 59, 313 * * page 119, entry corresponding to "ID 59". * * page 82, line 15 - line 16 * * Table II , page 119, paragraph corresponding to SEQ ID NO: 59. *	1-6	INV. C12N15/12 C07K14/705 C07K16/28 C12Q1/68 G01N33/68 A61P13/08 A61K38/17 A61K39/395 A01K67/027 C07K16/30
Y	L. ROWEN ET AL: "sequence of the human major histocompatibility complex class III region", EMBL DATABASE ENTRY AF134726, ACCESSION NUMBER AF134726, 29 March 1999 (1999-03-29), XP002144283, * abstract *	1-6	
Y	G.M. HUANG ET AL: "Prostate cancer expression profiling by cDNA sequencing analysis", EMBL DATABASE ENTRY AI557659, ACCESSION NUMBER AI557659, 25 March 1999 (1999-03-25), XP002144281, * abstract *	1-6	TECHNICAL FIELDS SEARCHED (IPC) C12N C07K
Y	GRESS T M ET AL: "A pancreatic cancer-specific expression profile", ONCOGENE, NATURE PUBLISHING GROUP, GB, vol. 13, 1 January 1996 (1996-01-01), pages 1819-1830, XP002089888, ISSN: 0950-9232 * abstract; figure 2 * * page 1826, left-hand column, paragraph 2 - page 1827, right-hand column, paragraph 2 *	1-14	
----- -/--			
The present search report has been drawn up for all claims			
2	Place of search Munich	Date of completion of the search 6 June 2012	Examiner Loubradou, Gabriel
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04C01)



EUROPEAN SEARCH REPORT

Application Number  
EP 10 18 5550

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y,D	REITER ET AL: "PROSTATE STEM CELL ANTIGEN: A CELL SURFACE MARKER OVEREXPRESSED IN PROSTATE CANCER", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA,US,NATIONAL ACADEMY OF SCIENCE. WASHINGTON, no. 95, 1 February 1998 (1998-02-01), pages 1735-1740, XP002078363, ISSN: 0027-8424 * the whole document *	1-14	TECHNICAL FIELDS SEARCHED (IPC)
Y,P	HUANG G M ET AL: "Prostate Cancer Expression Profiling by cDNA Sequencing Analysis", GENOMICS, ACADEMIC PRESS, SAN DIEGO, US, vol. 59, no. 2, 15 July 1999 (1999-07-15), pages 178-186, XP004444861, ISSN: 0888-7543, DOI: 10.1006/GENO.1999.5822 * abstract * * Sequence having GenBank accession number AI557659, see the notes, page 178, left-hand column. *	1-14	
Y,P	O'REGAN S ET AL: "An electric lobe suppressor for a yeast choline transport mutation belongs to a new family of transporter-like proteins", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, NATIONAL ACADEMY OF SCIENCES, vol. 97, no. 4, 15 February 2000 (2000-02-15), pages 1835-1840, XP002555945, ISSN: 0027-8424, DOI: 10.1073/PNAS.030339697 [retrieved on 2000-02-04] * abstract; figure 2A *	1-6	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 6 June 2012	Examiner Loubradou, Gabriel
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

EPO FORM 1503 03/02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 18 5550

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-06-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9906548 A	11-02-1999	AT 338117 T	15-09-2006
		AU 8554798 A	22-02-1999
		CA 2297306 A1	11-02-1999
		DE 69835751 T2	04-10-2007
		DK 1000146 T3	08-01-2007
		EP 1000146 A2	17-05-2000
		ES 2267192 T3	01-03-2007
		JP 2001512011 A	21-08-2001
		PT 1000146 E	31-10-2006
		WO 9906548 A2	11-02-1999
		-----	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	13跨膜蛋白在前列腺癌中表达		
公开(公告)号	<a href="#">EP2365081A3</a>	公开(公告)日	2012-07-18
申请号	EP2010185550	申请日	2000-04-12
[标]申请(专利权)人(译)	艾更斯司股份有限公司		
申请(专利权)人(译)	AGENSYS INC.		
当前申请(专利权)人(译)	AGENSYS INC.		
[标]发明人	AFAR DANIEL E HUBERT RENE S LEONG KAHAN RAITANO ARTHUR B SAFFRAN DOUGLAS C		
发明人	AFAR, DANIEL E. HUBERT, RENE S. LEONG, KAHAN RAITANO, ARTHUR B. SAFFRAN, DOUGLAS C.		
IPC分类号	C12N15/12 C07K14/705 C07K16/28 C12Q1/68 G01N33/68 A61P13/08 A61K38/17 A61K39/395 A01K67/027 C07K16/30 A61K31/7088 A61K39/00 A61K45/00 A61K48/00 A61P35/00 C07K14/82 C07K16/32 C12N11/15 C12N11/19 C12N11/21 C12N5/10 C12N15/02 C12N15/09 C12P21/02 C12P21/08 C12Q1/02 C12R1/91 G01N33/15 G01N33/50 G01N33/53 G01N33/566 G01N33/574 G01N33/577 G01N33/58		
CPC分类号	A01K2217/05 A61P13/08 A61P35/00 C07K14/705 C07K16/3069 C12N2799/026 C12N2799/027		
优先权	60/128858 1999-04-12 US		
其他公开文献	EP2365081A2		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

描述了前列腺肿瘤相关基因 ( 命名为24P4C12 ) 及其编码的蛋白质。24P4C12在前列腺组织异种移植中高度表达, 提供其在至少一些前列腺癌中开启的证据。24P4C12为前列腺癌和其他癌症提供诊断和/或治疗靶标

DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)		
Category	Citation of document with indication, where appropriate, of relevant passages				
Y	WO 99/06548 A (LACHOIX BRUNO; DUCLERT AYMERIC (FR); GENSET (FR); DUMAS MILNE EDNA) 11 February 1999 (1999-02-11) * page 7, line 14 - line 20; claims 27-28; examples 17, 19, 25-30, 43, 51; sequences 59, 313 * page 119, entry corresponding to "ID 59" * page 82, line 15 - line 16 * * Table II, page 119; paragraph corresponding to SEQ ID NO: 99 *	1-6	INV. C12N15/12 C07K14/705 C07K16/28 C12Q1/68 G01N33/68 A61P13/08 A61K38/17 A61K39/395 A01K67/027 C07K16/30		
Y	L. ROWEN ET AL: "sequence of the human major histocompatibility complex class III region". EMBL DATABASE ENTRY AF134726. ACCESSION NUMBER AF134726. 29 March 1999 (1999-03-29). XP002144283. * abstract *	1-6			
Y	G.M. HUANG ET AL: "Prostate cancer expression profiling by cDNA sequencing analysis". EMBL DATABASE ENTRY AI557659. ACCESSION NUMBER AI557659. 25 March 1999 (1999-03-25). XP002144281. * abstract *	1-6	TECHNICAL FIELDS SEARCHED (IPC) C12N C07K		
Y	GRESS T M ET AL: "A pancreatic cancer-specific expression profile". ONCOGENE, NATURE PUBLISHING GROUP, GB, vol. 13, 1 January 1996 (1996-01-01), pages 1819-1830, XP00568386. ISSN: 0950-9232 * abstract; figure 2 * * page 1825, left-hand column, paragraph 2 * page 1827, right-hand column, paragraph 2 *	1-14			
The present search report has been drawn up for all claims					
Munich		6 June 2012	Loubradou, Gabriel		
<table border="0"> <tr> <td> <p>CATEGORY OF CITED DOCUMENTS</p> <p>Y particularly relevant to claim</p> <p>X particularly relevant if combined with another</p> <p>W relevant to the state of the art</p> <p>A non-relevant document</p> <p>U unpublished document</p> </td> <td> <p>E theory or principle underlying the invention</p> <p>W utility patent document, but published on or after the filing date</p> <p>D document cited to the application</p> <p>L document cited for other reasons</p> <p>&amp; number of the same patent family, corresponding document</p> </td> </tr> </table>				<p>CATEGORY OF CITED DOCUMENTS</p> <p>Y particularly relevant to claim</p> <p>X particularly relevant if combined with another</p> <p>W relevant to the state of the art</p> <p>A non-relevant document</p> <p>U unpublished document</p>	<p>E theory or principle underlying the invention</p> <p>W utility patent document, but published on or after the filing date</p> <p>D document cited to the application</p> <p>L document cited for other reasons</p> <p>&amp; number of the same patent family, corresponding document</p>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>Y particularly relevant to claim</p> <p>X particularly relevant if combined with another</p> <p>W relevant to the state of the art</p> <p>A non-relevant document</p> <p>U unpublished document</p>	<p>E theory or principle underlying the invention</p> <p>W utility patent document, but published on or after the filing date</p> <p>D document cited to the application</p> <p>L document cited for other reasons</p> <p>&amp; number of the same patent family, corresponding document</p>				