



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 162 435 A (MINION F CHRIS [US] ET AL) 19 December 2000 (2000-12-19) * the whole document *	1-25	INV. C12P21/06 C12N1/00 C12N1/20 C07H21/04 A61K39/02 G01N33/53
X	----- DATABASE Geneseq [Online] 20 October 2000 (2000-10-20), "Mycoplasma hyopneumoniae genomic clone pAD1027." XP002445479 retrieved from EBI accession no. GSN:AAA56853 Database accession no. AAA56853 * the whole document * & WO 00/31115 A (COMMW SCIENT IND RES ORG [AU]; MOORE ROBERT JOHN [AU]; DORAN TIMOTHY J) 2 June 2000 (2000-06-02)	1-25	
X	----- DATABASE Geneseq [Online] 20 October 2000 (2000-10-20), "Protein deduced from Mycoplasma hyopneumoniae genomic clone pAD1027." XP002445480 retrieved from EBI accession no. GSP:AAB05967 Database accession no. AAB05967 * the whole document * & WO 00/31115 A (COMMW SCIENT IND RES ORG [AU]; MOORE ROBERT JOHN [AU]; DORAN TIMOTHY J) 2 June 2000 (2000-06-02) ----- -/--	1-25	
			TECHNICAL FIELDS SEARCHED (IPC)
			C12P C12N C07H A61K G01N
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search <b>Munich</b>		Date of completion of the search <b>21 December 2007</b>	Examiner <b>NICHOGIANNOPOULOU, A</b>
CATEGORY OF CITED DOCUMENTS		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	
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			

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EPO FORM 1503 03.82 (P04C04)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	<p>DATABASE EMBL [Online] 29 July 2000 (2000-07-29), "Mycoplasma hyopneumoniae strain ISU 232 YX1 (yx1) gene, partial cds; p110 membrane protein precursor, gene, complete cds; and YX2 (yx2) gene, partial cds." XP002463269 retrieved from EBI accession no. EMBL:AF279292 Database accession no. AF279292 * the whole document *</p> <p style="text-align: center;">-----</p>	1-25	
X	<p>DATABASE UniProt [Online] 1 October 2000 (2000-10-01), "YX2 (Fragment)." XP002463270 retrieved from EBI accession no. UNIPROT:Q9KGX9 Database accession no. Q9KGX9 * the whole document *</p> <p style="text-align: center;">-----</p>	1-25	
T	<p>MINION F CHRIS ET AL: "The genome sequence of Mycoplasma hyopneumoniae strain 232, the agent of swine mycoplasmosis" JOURNAL OF BACTERIOLOGY, vol. 186, no. 21, November 2004 (2004-11), pages 7123-7133, XP002443117 ISSN: 0021-9193 * page 7128, right-hand column, line 11 - line 18; figure 3 *</p> <p style="text-align: center;">-----</p> <p style="text-align: center;">-/--</p>	1-13	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search		Date of completion of the search	Examiner
Munich		21 December 2007	NICHOGIANNOPOULOU, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 ..... &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C04)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
T	ADAMS CARY ET AL: "In vivo expression analysis of the P97 and P102 paralog families of Mycoplasma hyopneumoniae" INFECTION AND IMMUNITY, vol. 73, no. 11, November 2005 (2005-11), pages 7784-7787, XP002443118 ISSN: 0019-9567 * the whole document * -----	1-13	
			TECHNICAL FIELDS SEARCHED (IPC)
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search <b>Munich</b>		Date of completion of the search <b>21 December 2007</b>	Examiner <b>NICHOGIANNOPOULOU, A</b>
<b>CATEGORY OF CITED DOCUMENTS</b> 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	

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EPO FORM 1503 03.02 (P04C04)



### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:  
1-25, all partially
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-25, all partially

Polypeptides, compositions, nucleic acids, vectors, host cells, uses, methods and kits relating to SEQ ID Nos: 1 and 2.

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Inventions 2-10: claims 1-25, all partially

Inventions 2-10 as invention 1 but relating to SEQ ID Nos:3-20.

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

EP 03 74 2308

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.

21-12-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6162435	A	19-12-2000	NONE
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WO 0031115	A	02-06-2000	BR 9915066 A 15-01-2002
		CA 2351736 A1 02-06-2000	
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		NZ 511623 A 29-04-2003	
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		ZA 200103677 A 07-05-2002	
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专利名称(译)	免疫原性猪肺炎支原体多肽		
公开(公告)号	<a href="#">EP1546357A4</a>	公开(公告)日	2008-06-18
申请号	EP2003742308	申请日	2003-06-27
[标]申请(专利权)人(译)	衣阿华州立大学研究基金公司 DEPT的AGRI FOR & 谨代表新南威尔士州		
申请(专利权)人(译)	农业部和相关代新南威尔士州的州		
当前申请(专利权)人(译)	农业部和相关代新南威尔士州的州		
[标]发明人	MINION CHRIS F DJORDJEVIC STEVEN P		
发明人	MINION, CHRIS, F. DJORDJEVIC, STEVEN P.		
IPC分类号	A61K39/00 C07K14/30 C12P21/06 C12N1/00 C12N1/20 C07H21/04 A61K39/02 G01N33/53		
CPC分类号	C07K14/30 A61K39/00 A61K2039/53 Y10S435/81		
代理机构(译)	DZIEGLEWSKA , HANNA EVA		
优先权	60/392632 2002-06-28 US		
其他公开文献	EP1546357B1 EP1546357A2		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

提供了猪肺炎支原体多肽和核酸，以及核酸表达载体和含有核酸载体的宿主细胞。此外，提供含有猪肺炎支原体多肽和核酸的组合物用于治疗猪的方法以预防地方性肺炎。此外，本发明提供了用于检测猪群中猪肺炎支原体感染的诊断测试。

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