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DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
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(54) Title: SUBUNIT VACCINES FOR HERPES VIRUSES AND METHODS OF USE

(57) Abstract: The present disclosure generally relates to vaccine compositions for Herpes Simplex Viruses (HSV) types 1 and/or 2. The vaccines comprise isolated antigens or glycoprotein subunits of the viruses, optionally with an adjuvant, such as a cationic liposome DNA complex (CLDC). Also the present disclosure contains methods of vaccinating a subject utilizing these compositions.



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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K39/245 C07K14/035
ADD.

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)
A61K 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)

EP0-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 156 319 A (COHEN GARY H [US] ET AL) 5 December 2000 (2000-12-05)	1,2,16, 21,22, 35-38,46
Y	* columns 2, 8, 14-16 *claims 1, 9, 10 ----- -/--	3-15, 17-20, 23-34, 39-45, 47,48



Further documents are listed in the continuation of Box C.



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

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"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

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2011/026188

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. (means)
☐ on paper
☒ in electronic form
 - b. (time)
☒ in the international application as filed
☐ together with the international application in electronic form
☐ subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2011/026188

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PENG T ET AL: "The gH-gL complex of herpes simplex virus (HSV) stimulates neutralizing antibody and protects mice against HSV type 1 challenge.", JOURNAL OF VIROLOGY JAN 1998 LNKD-PUBMED:9420201, vol. 72, no. 1, January 1998 (1998-01), pages 65-72, XP002646909, ISSN: 0022-538X * Abstract *; page 71, left-hand column	1-48
A	LASARO M O ET AL: "Targeting of antigen to the herpesvirus entry mediator augments primary adaptive immune responses", NATURE MEDICINE, NATURE PUBLISHING GROUP, NEW YORK, NY, US, vol. 14, no. 2, 1 February 2008 (2008-02-01), pages 205-212, XP002603203, ISSN: 1078-8956, DOI: DOI:10.1038/NM1704 [retrieved on 2008-01-13]	1-48
Y	CHANG S ET AL: "A novel vaccine adjuvant for recombinant flu antigens", BIOLOGICALS, ACADEMIC PRESS LTD., LONDON, GB, vol. 37, no. 3, 1 June 2009 (2009-06-01), pages 141-147, XP026136304, ISSN: 1045-1056, DOI: DOI:10.1016/J.BIOLOGICALS.2009.02.019 [retrieved on 2009-03-12] * Abstract * Conclusions * Ref. 12 *; page 142, left-hand column	1-48
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6156319 A	05-12-2000	US 5807557 A	15-09-1998
