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(54) Title: ANTIBODY GENERATION FROM PLASMACYTOMA-PRONE TRANSGENIC ANIMALS

(57) Abstract: Certain transgenic animals which are prone to the rapid cell division of their antibody-secreting cells have superior properties for the generation of monoclonal antibodies. Not only can their antibody producing cells can be made into hybridomas with superior growth to hybridomas from non-prone animals, but the antibody producing cells themselves can be cultured directly without cell fusion or further manipulation. Disclosed herein are methods of making monoclonal antibodies comprising exposing the transgenic animals disclosed herein to an antigen and extracting antigen-specific antibody secreting cells from the transgenic animal.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 12/33797

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C12P 21/08; C12N 5/16 (2012.01)

USPC - 435/70.21; 435/326

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)

USPC: 435/70.21; 435/326

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC: 435/70.2, 70.1, 41, 70.21, 326; 424/141.1, 130.1

(keyword limited; terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST (PGPB,USPT,USOC,EPAB,JPAB); Google; PubMed

Search terms: plasmacytoma, IL-6, interleukin 6, antibody, production, immunization, monoclonal, hybridoma, transfected, transgenic, mouse, strain, immortalization, fusion

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE BENEDETTI et al. In vivo neutralization of human IL-6 (hIL-6) achieved by immunization of hIL-6-transgenic mice with a hIL-6 receptor antagonist. J. Immunol. 1 April 2001 (01.04.2001), Vol. 166, No. 7, pages 4334-4340; abstract; pg 4335, para 4; Table 1	1-8
Y	US 2009/0269336 A1 (HONG et al.) 29 October 2009 (29.10.2009) para [0044]	1-8
Y	KEMPKE et al. Immortalization of human primary B lymphocytes in vitro with DNA. Proc. Natl. Acad. Sci. USA. 20 June 1995 (20.06.1995), Vol. 92, No. 13, pages 5875-5879; abstract	5
A	WEISSINGER et al. Induction of plasmacytomas secreting antigen-specific monoclonal antibodies with a retrovirus expressing v-abl and c-myc. Proc. Natl. Acad. Sci. USA. 1 October 1991 (01.10.1991), Vol. 88, No. 19, pages 8735-8739	1-8

☐ Further documents are listed in the continuation of Box C.


* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"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

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