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(54) Title: METHODS FOR MAKING ANTIBODY FRAGMENTS AND COMPOSITIONS RESULTING THEREFROM

(57) Abstract: Improved methods for making antibody fragments, preferably F(ab')₂ fragments from various classes and subclasses of antibodies is described. Pretreatment of antibodies with deglycosylases or cellular inhibition of glycosylation during expression, yields antibodies having improved susceptibility towards protease cleavage, preferably pepsinolysis, which yields F(ab')₂ antibody fragments. Compositions resulting from such methods are further disclosed.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/18573

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 39/395; C07K 16/00, 16/18; C12P 21/06, 21/08
US CL : 424/133.1, 809; 435/68.1, 70.21; 436/512; 530/387.1, 866

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)

U.S. : 424/133.1, 809; 435/68.1, 70.21; 436/512; 530/387.1, 866

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 practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,849,352 (SULLIVAN et al) 18 July 1989. See column 2, lines 51-64; column 4, line 60-column 5, line 2.	23
X	US 5,099,005 (NICHOLS et al) 24 March 1992. See column 2, lines 40-59; column 3, lines 44-60; column 7, lines 3-33.	1-11, 22, 24-27
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Y		23
X	US 5,585,097 (BOLT et al) 17 December 1996. See column 2, lines 47-67; column 6, lines 28-54; column 8, lines 16-45.	24
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A		19-21
X	US 6,218,149 B1 (MORRISON et al) 17 April 2001. See column 2, lines 42-46 and 52-46; column 7, lines 5-65; column 11, lines 1-35; column 14, lines 6-60.	24
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A		12-21
E,X	US 2002/0150914 A1 (ANDERSEN et al) 17 October 2002. See page 3, paragraph [0028] and page 5, paragraph [0047].	22, 24

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

☐ See patent family annex.

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

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INTERNATIONAL SEARCH REPORT

PCT/US02/18573

Continuation of B. FIELDS SEARCHED Item 3:

STN (CAS & BIOSIS): F(W)AB(W)2 AND (AGLYCOSYL? OR DEGLYCOSYL? OR NONGLYCOSYL? OR
NON(W)GLYCOSYL? OR GLYCOSYL?(W)DEFICIENT)