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(54) Title: CD34(+) CELLS AND THEIR METHODS OF USE

(57) Abstract: The present invention provides isolated cells that are selectively enriched for hematopoietic progenitor cells that are precursors for natural killer (NK) cells. These cells are both CD34 and CD45RA positive and express C-integrin β_7 , and are referred to as CD34^{dim}CD45RA⁽⁺⁾C-integrin β_7 ^{bright}. The invention provides methods for isolating these cells, for inducing formation CD56^{bright} NK cells, and for treating diseases associated with immunodeficiency, and cancer.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: C12N 5/08(2006.01);C12N 5/00(2006.01);A61K 35/28(2006.01)

USPC: 435/372,375,377;424/577

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. : 435/372, 375, 377; 424/577

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.
X	US 5,877,299 A (THOMAS) 02 March 1999 (02.03.1999) see entire document, Abstract in particular.	1-26
X	US 6,008,004 A (OLWEUS et al) 28 December 1999 (28.12.1999) see entire document.	1-26

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	"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
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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	"&"	document member of the same patent family

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Continuation of B. FIELDS SEARCHED Item 3:
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