

Title (en)
EX-VIVO EXPANSION OF HEMATOPOIETIC STEM CELL POPULATIONS IN MONONUCLEAR CELL CULTURES

Title (de)
EX-VIVO-EXPANSION HÄMATOPOETISCHER STAMMZELLPOPULATIONEN IN MONONUKLEÄREN ZELLKULTUREN

Title (fr)
EXPANSION EX VIVO DE POPULATIONS DE CELLULES SOUCHES HEMATOPOIETIQUES DANS DES CULTURES DE CELLULES MONONUCLEAIRES

Publication
EP 1534820 A4 20060426 (EN)

Application
EP 03787995 A 20030817

Priority
• IL 0300681 W 20030817
• IL 15290402 A 20021117
• IL 0300062 W 20030123
• IL 0300064 W 20030126
• US 40413702 P 20020819
• US 40414502 P 20020819
• US 45254503 P 20030307

Abstract (en)
[origin: WO2004016731A2] Ex-vivo methods of expanding hematopoietic stem cells of hematopoietic mononuclear cells that comprise a major fraction of hematopoietic committed cells and a minor fraction of hematopoietic stem and progenitor cells, expanded populations of hematopoietic stem cells obtained thereby and their uses are disclosed

IPC 1-7
C12N 5/00

IPC 8 full level
A01N 63/00 (2006.01); **A61K 48/00** (2006.01); **C12N 5/00** (2006.01); **C12N 5/0789** (2010.01); **A61K 35/12** (2015.01); **A61K 39/00** (2006.01)

CPC (source: EP)
A61P 37/00 (2017.12); **C12N 5/0647** (2013.01); **A61K 2035/122** (2013.01); **A61K 2035/124** (2013.01); **A61K 2039/515** (2013.01); **C12N 2500/20** (2013.01); **C12N 2500/38** (2013.01); **C12N 2501/125** (2013.01); **C12N 2501/145** (2013.01); **C12N 2501/23** (2013.01); **C12N 2501/26** (2013.01); **C12N 2501/385** (2013.01); **C12N 2501/599** (2013.01); **C12N 2503/02** (2013.01); **C12N 2510/00** (2013.01); **G01N 2333/70567** (2013.01)

Citation (search report)
• [DE] WO 03078567 A2 20030925 - GAMIDA CELL LTD [IL], et al
• [PX] FIBACH EITAN ET AL: "Retinoic Acid Antagonist Inhibits CD38 Antigen Expression on Human Hematopoietic Cells.", BLOOD, vol. 100, no. 11, 16 November 2002 (2002-11-16), & 44TH ANNUAL MEETING OF THE AMERICAN SOCIETY OF HEMATOLOGY; PHILADELPHIA, PA, USA; DECEMBER 06-10, 2002, pages Abstract No. 644, XP009058480, ISSN: 0006-4971
• [DX] KOEHLER T ET AL: "Defining optimum conditions for the ex vivo expansion of human umbilical cord blood cells. Influences of progenitor enrichment, interference with feeder layers, early-acting cytokines and agitation of culture vessels", STEM CELLS, ALPHAMED PRESS, DAYTON, OH, US, vol. 17, no. 1, 1999, pages 19 - 24, XP002177251, ISSN: 1066-5099
• [DX] BHATIA M ET AL: "PURIFICATION OF PRIMITIVE HUMAN HEMATOPOIETIC CELLS CAPABLE OF REPOPULATING IMMUNE-DEFICIENT MICE", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE, WASHINGTON, DC, US, vol. 94, May 1997 (1997-05-01), pages 5320 - 5225, XP001055074, ISSN: 0027-8424
• [A] PODESTA MARINA ET AL: "Extracellular cyclic ADP-ribose increases intracellular free calcium concentration and stimulates proliferation of human hemopoietic progenitors", FASEB JOURNAL, vol. 14, no. 5, April 2000 (2000-04-01), pages 680 - 690, XP002357785, ISSN: 0892-6638
• [A] LEWANDOWSKI DANIEL ET AL: "Phosphatidylinositol 3-kinases are involved in the all-trans retinoic acid-induced upregulation of CD38 antigen on human haematopoietic cells", BRITISH JOURNAL OF HAEMATOLOGY, vol. 118, no. 2, 25 July 2002 (2002-07-25), pages 535 - 544, XP002357786, ISSN: 0007-1048
• [A] WALL KATHERINE A ET AL: "Inhibition of the intrinsic NAD+ glycohydrolase activity of CD38 by carbocyclic NAD analogues", BIOCHEMICAL JOURNAL, vol. 335, no. 3, 1 November 1998 (1998-11-01), pages 631 - 636, XP002357787, ISSN: 0264-6021
• [A] SAUVE ANTHONY A ET AL: "Mechanism-based inhibitors of CD38: A mammalian cyclic ADP-ribose synthetase", BIOCHEMISTRY, vol. 41, no. 26, 2 July 2002 (2002-07-02), pages 8455 - 8463, XP002357788, ISSN: 0006-2960
• [A] SAMMONS J ET AL: "Mechanisms mediating the inhibitory effect of all-trans retinoic acid on primitive hematopoietic stem cells in human long-term bone marrow culture", STEM CELLS (MIAMISBURG), vol. 18, no. 3, 2000, pages 214 - 219, XP002357789, ISSN: 1066-5099
• See references of WO 2004016731A2

Citation (examination)
COUTINHO ET AL., BLOOD, vol. 75, no. 11, 1990, pages 2118

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004016731 A2 20040226; WO 2004016731 A3 20040910; AU 2003250519 A1 20040303; AU 2003250519 A8 20040303; BR 0314402 A 20050719; CA 2495824 A1 20040226; EP 1534820 A2 20050601; EP 1534820 A4 20060426; JP 2006508692 A 20060316; MX PA05001992 A 20050803

DOCDB simple family (application)
IL 0300681 W 20030817; AU 2003250519 A 20030817; BR 0314402 A 20030817; CA 2495824 A 20030817; EP 03787995 A 20030817; JP 2005502022 A 20030817; MX PA05001992 A 20030817