(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 May 2010 (14.05.2010)

PCT

(10) International Publication Number
WO 2010/051634 A1

(51) International Patent Classification:
C12N 5/0783 (2010.01) *A61P 35/00* (2006.01)
A61K 35/14 (2006.01) *A61P 37/06* (2006.01)
A61P 31/18 (2006.01) *C12N 5/10* (2006.01)

(21) International Application Number:
PCT/CA2009/001601

(22) International Filing Date:
6 November 2009 (06.11.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/112,503 7 November 2008 (07.11.2008) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

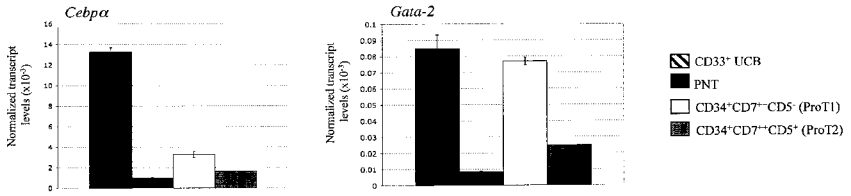
— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

— *with sequence listing part of description (Rule 5.2(a))*

(54) **Title**: HUMAN PROGENITOR T-CELLS

Figure 9



(57) **Abstract**: Human progenitor T cells that are able to successfully engraft a murine thymus and differentiate into mature human T and NK cells are described. The human progenitor T cells have the phenotype CD34+CD7+CD 1a-CD5- or CD34+CD7+CD1a-CD5+ and are derived from human hematopoietic stem cells, embryonic stem cells and induced pluripotent stem cells by coculture with cells expressing a Notch receptor ligand (OP9-DL1 or OP9-DL4). Such cells are useful in a variety of applications including immune reconstitution, the treatment of immunodeficiencies and as carriers for genes used in gene therapy.

WO 2010/051634 A1