

Title (en)

PRODUCTION AND USE OF DOPAMINERGIC CELLS TO TREAT DOPAMINERGIC DEFICIENCIES

Title (de)

PRODUKTION UND VERWENDUNG VON DOPAMINERGISCHEN ZELLEN FÜR DIE BEHANDLUNG VON DOPAMINERGISCHEN DEFIZIENZEN.

Title (fr)

PRODUCTION ET UTILISATION DE CELLULES DOPAMINERGIQUES POUR TRAITER DES DEFICIECES DOPAMINERGIQUES

Publication

EP 1109887 A4 20030521 (EN)

Application

EP 98959412 A 19981110

Priority

- US 9823977 W 19981110
- US 9451598 P 19980729

Abstract (en)

[origin: WO0006700A1] Differentiated neuronal cells suitable for transplantation in individuals with a dopamine deficiency are derived from progenitor cells. The progenitor cells are treated with at least one inducing agent such as retinoic acid for a time period sufficient to optimize expression of tyrosine hydroxylase. The cells intended for transplantation are optionally treated with a lithium salt to enhance bcl-2 production and survival. Optionally, the progenitor cells may be co-cultured with Sertoli cells, astrocytes, glial cells, accessory cells or a combination thereof. The transplantation-ready cells are isolated and harvested. The resulting neuronal cells are highly purified and have a phenotype optimized for a dopaminergic deficiency, such as Parkinson's Disease.

IPC 1-7

C12N 5/00; C12N 15/00; A01K 67/00; A01N 63/00

IPC 8 full level

A01K 67/027 (2006.01); **C12N 5/06** (2006.01); **C12N 5/0793** (2010.01); **A61K 35/12** (2006.01)

CPC (source: EP)

A01K 67/0271 (2013.01); **C12N 5/0619** (2013.01); **A61K 35/12** (2013.01); **C12N 2500/12** (2013.01); **C12N 2501/48** (2013.01);
C12N 2502/246 (2013.01)

Citation (search report)

- [X] WO 9615224 A1 19960523 - NEUROSPHERES HOLDINGS LTD [CA], et al
- [X] WO 9733470 A1 19970918 - UNIV SOUTH FLORIDA [US], et al
- [X] WO 9410292 A1 19940511 - NEUROSPHERES LTD [CA]
- [A] WO 9006757 A1 19900628 - UNIV CALIFORNIA [US]
- [XD] PLEASURE S J ET AL: "PURE, POSTMITOTIC, POLARIZED HUMAN NEURONS DERIVED FROM NTERA 2 CELLS PROVIDE A SYSTEM FOR EXPRESSING EXOGENOUS PROTEINS IN TERMINALLY DIFFERENTIATED NEURONS", JOURNAL OF NEUROSCIENCE, NEW YORK, NY, US, vol. 12, no. 5, May 1992 (1992-05-01), pages 1802 - 1815, XP002915302, ISSN: 0270-6474
- [X] MENA MARIA ANGELES ET AL: "Effects of dibutyryl cyclic AMP and retinoic acid on the differentiation of dopamine neurons: Prevention of cell death by dibutyryl cyclic AMP.", JOURNAL OF NEUROCHEMISTRY, vol. 65, no. 6, 1995, pages 2612 - 2620, XP009001318, ISSN: 0022-3042
- [XD] TERAO T ET AL: "LITHIUM CHLORIDE STIMULATES CATECHOLAMINE SYNTHESIS AND SECRETION IN CULTURED BOVINE ADRENAL MEDULLARY CELLS", BIOLOGICAL PSYCHIATRY, vol. 31, no. 10, 1992, pages 1038 - 1049, XP009001664, ISSN: 0006-3223
- [T] LAYTONBIO: "Press releases number: 24, 26, 27, 28, 29, 30, 31(a) to (k)", HTTP://WWW.LAYTONBIO.COM/WHATSNEW.HTM, 9 March 1999 (1999-03-09), XP002199748
- See references of WO 0006700A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IE IT LI NL SE

DOCDB simple family (publication)

WO 0006700 A1 20000210; EP 1109887 A1 20010627; EP 1109887 A4 20030521

DOCDB simple family (application)

US 9823977 W 19981110; EP 98959412 A 19981110