

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 October 2018 (11.10.2018)



(10) International Publication Number
WO 2018/185709 A1

(51) International Patent Classification:
C12N 5/0784 (2010.01) A61K 35/15 (2015.01)

(21) International Application Number:
PCT/IB2018/052378

(22) International Filing Date:
05 April 2018 (05.04.2018)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
110012 05 April 2017 (05.04.2017) PT
17171166.6 15 May 2017 (15.05.2017) EP
110263 24 August 2017 (24.08.2017) PT
110267 25 August 2017 (25.08.2017) PT

(71) Applicant: CENTRO DE NEUROCIENCIAS E BIOLOGIA CELULAR [PT/PT]; Universidade de Coimbra, Center for Neuroscience and Cell Biology (CNC), Largo Marquês do Pombal, 3004-517 Coimbra (PT).

(72) Inventors: RIBEIRO LEMOS PEREIRA, Carlos Filipe; Rua João Baptista da Silva 390, Moledo, 4910-264 Caminha (PT). FERREIRA PIRES, Cristiana; Rua Fonte do Areeiro n29, 3770-352 Palhaça (PT). FIÚZA ROSA, Fábio Alexandre; Rua do Brejo, N°53 Touria Pousos, 2410-205 Leiria (PT).

(74) Agent: TEIXEIRA DE CARVALHO, Anabela; Patentrete, Edifício Net, Rua de Salazares 842, 4149-002 Porto (PT).

(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, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,

TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: COMPOSITIONS FOR REPROGRAMMING CELLS INTO DENDRITIC CELLS OR ANTIGEN PRESENTING CELLS, METHODS AND USES THEREOF

(57) Abstract: The present disclosure relates to compositions, nucleic acid constructs, methods and kits thereof for cell induction or reprogramming cells to the dendritic cell state or antigen presenting cell state, based, in part, on the surprisingly effect described herein of novel use and combinations of transcription factors that permit induction or reprogramming of differentiated or undifferentiated cells into dendritic cells or antigen presenting cells. Such compositions, nucleic acid constructs, methods and kits can be used for inducing dendritic cells in vitro, ex vivo, or in vivo, and these induced dendritic cells or antigen presenting cells can be used for immunotherapy applications.



WO 2018/185709 A1