

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
20 June 2019 (20.06.2019)



(10) International Publication Number
WO 2019/115674 A1

(51) International Patent Classification:
C07K 16/18 (2006.01)

(21) International Application Number:
PCT/EP2018/084697

(22) International Filing Date:
13 December 2018 (13.12.2018)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1720975.0 15 December 2017 (15.12.2017) GB

(71) Applicant: **UCB BIOPHARMA SPRL** [BE/BE]; 60, Allée de la Recherche, 1070 Brussels (BE).

(72) Inventors: **ADAMS, Ralph**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **DOWNEY, Patrick**; c/o IP Department, UCB Biopharma SPRL, 60, Allée de la Recherche, 1070 Brussels (BE). **BAKER, Terence Seward**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **TYSON, Kerry Louise**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **DE LICHTERVELDE, Lorenzo**; c/o IP Department, UCB Biopharma SPRL, 60 Allée de la Recherche, 1070 Brussels (BE). **LIGHTWOOD, Daniel John**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **MCMILLAN, David James**; c/o IP Department, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB).

(74) Agent: **UCB INTELLECTUAL PROPERTY**; c/o UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB).

(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).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))



WO 2019/115674 A1

(54) Title: ANTI-ALPHA-SYNUCLEIN ANTIBODIES

(57) Abstract: The present invention relates to antibodies binding alpha synuclein and fragments thereof capable of binding alpha synuclein as a monomer and in fibrils and preventing alpha synuclein aggregation induced by alpha synuclein fibrils. The antibodies of the present invention are for use in the treatment of alpha synucleinopathies, including Parkinson's disease.