

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
12 August 2021 (12.08.2021)



(10) International Publication Number
WO 2021/156171 A1

(51) International Patent Classification:

C07K 16/40 (2006.01) A61P 35/00 (2006.01)
A61P 17/00 (2006.01)

(21) International Application Number:

PCT/EP2021/052249

(22) International Filing Date:

01 February 2021 (01.02.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2001447.8 03 February 2020 (03.02.2020) GB
2008022.2 28 May 2020 (28.05.2020) GB

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

(72) Inventors: **DEDI, Neesha**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **ELLIOTT, Peter Charles**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **LEYSEN, Seppe Frans Roman**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **MASON, Sean**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **MCMILLAN, David James**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **NESS, Gillian Claire**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **PENGO, Niccolo**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **REDHEAD, Martin Anthony**; c/o IPD, UCB Celltech, 208 Bath Road, Slough Berkshire SL1 3WE (GB). **TURNER, Alison**; 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).

(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, IT, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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))

(54) Title: ANTIBODIES AGAINST KLK5

(57) Abstract: The present invention relates to antibodies which bind and inhibit KLK5 and methods of using the same to treat diseases caused by KLK5 imbalance. In particular, the present invention relates to inhibitory anti-KLK5 antibodies and their use in the treatment of Netherton disease, atopic dermatitis and cancer.

WO 2021/156171 A1