

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
07 July 2022 (07.07.2022)



(10) International Publication Number
WO 2022/147525 A1

(51) International Patent Classification:
C07K 14/725 (2006.01)

(21) International Application Number:
PCT/US2022/011103

(22) International Filing Date:
04 January 2022 (04.01.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/133,494 04 January 2021 (04.01.2021) US
63/163,171 19 March 2021 (19.03.2021) 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, 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))

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))

(54) Title: CHIMERIC CO-STIMULATORY PROTEINS COMPRISING MUTANT INTRACELLULAR DOMAINS WITH IN-
CREASED EXPRESSION

NRGRKKLLYIEKQPFMRPVQTQEDGCSRCFFEEEGGCEL	(SEQ ID NO: 1)	(CD137/4-1BB Human)
RKKFPHTFKQPFKKFTGAAQEDACSCRCFQEEEGGGGYEL	(SEQ ID NO: 2)	(CD137/4-1BB Mouse)
RRDQRIFPDAHKPPGGGSRFTPIQEEQADAHSTLAKI	(SEQ ID NO: 4)	(CD134/OX40 Human)
RKAARLEFNTKPKCWGNSERTPIQEEHTDAHFTLAKI	(SEQ ID NO: 5)	(CD134/OX40 Mouse)
QRRKYFSNKQESPVPEAPCPHYSCPREEGSTPIQEDYRKPEPACSP	(SEQ ID NO: 7)	(CD27 Human)
QLGLHIWQLRSQCMWPRETQQLLEVPSTEDARSCQFPPEERGERGSAEKKGRIGDLWV	(SEQ ID NO: 8)	(GITR Human)

FIG. 1

(57) Abstract: The present application relates to functionally optimized intracellular co-stimulatory domains, optionally in combination with cell-intrinsic immune checkpoint inhibitory receptors or immune-stimulatory receptors or portions thereof, which can be used in adoptive cell therapy to treat human diseases and disorders.

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