

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
19 June 2025 (19.06.2025)



(10) International Publication Number
WO 2025/125590 A2

(51) International Patent Classification:

A61K 39/00 (2006.01) C07K 14/74 (2006.01)
C07K 14/725 (2006.01) A61K 38/00 (2006.01)

LU, LV, MC, ME, 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).

(21) International Application Number:

PCT/EP2024/086261

Published:

- without international search report and to be republished upon receipt of that report (Rule 48.2(g))
- 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

(22) International Filing Date:

13 December 2024 (13.12.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

23217230.4 15 December 2023 (15.12.2023) EP
24198575.3 05 September 2024 (05.09.2024) EP

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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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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,

(54) Title: TCR RECOGNIZING G12V MUTATED RAS AND USES THEREOF

(57) Abstract: The invention relates to a selection of verified targets for T-cell receptors (TCR) against mutated human rat sarcoma (RAS) peptides as well as to several new T-cell receptors (TCR), which are isolated and/or expressed in an engineered cell, and which specifically recognize a G12V mutated human rat sarcoma (RAS) peptide, wherein the peptide is a mutated human Kirsten RAS (KRAS) peptide, a mutated human Harvey RAS (HRAS) peptide, or a human neuroblastoma RAS (NRAS) peptide, which consists of VVGAVGVGK (SEQ ID NO: 1) or VVGAVGVGK (SEQ ID NO:2) presented in a HLA-A*11 complex, and wherein the individual TCR comprises a paired TCR alpha- and TCR beta-chain. The invention further relates to engineered cells and vectors expressing said TCRs and medical uses of the same for treating cancer patients.



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