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(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.



WO 2025/125590 A3