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(71) Applicant: **MEDIGENE IMMUNOTHERAPIES GMBH** [DE/DE]; Lochhamer Strasse 11, 82152 Planegg-Martinsried (DE).

(72) Inventors: **LONGINOTTI, Giulia**; Christrosenweg 8, 81377 München (DE). **CATARINELLA, Mario**; Niedersedernstr. 9, 81375 München (DE). **DAVARI, Kathrin**; Ulmenstr. 14, 82362 Weilheim (DE). **SALVERMOSER, Melanie**; Richard-Wagner-Weg 4, 82178 Puchheim (DE).

(74) Agent: **WEINZIERL, Gerhard** et al.; c/o Schiweck Weinzierl Koch, Ganghoferstrasse 68b, 80339 Munich (DE).

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(54) Title: T-CELL RECEPTOR VARIANT AGAINST mKRAS7-16 G12V

(57) Abstract: The present invention relates to a TCR polypeptide complex and/or a combination comprising a novel TCR characterized by its CDR sequences of the α chain variable region and the β chain variable region and by its antigenic specificity to a particular mutated KRAS epitope or a fragment thereof presented in the context of a MHC class I molecule. The present invention further relates to a nucleic acid, a vector as well as a host cell comprising said nucleic acid or said vector. The present invention relates to a method for obtaining said TCR and said chimeric co-stimulatory receptor and to a pharmaceutical or diagnostic composition comprising the abovementioned. The present invention further relates to the abovementioned for use as a medicament or for use in a method of diagnosing, detecting, preventing, and/or treating cancer. Furthermore, the present invention relates to a method of detecting the presence of a cancer in a subject in vitro, by applying within said method the abovementioned, and the use of the abovementioned for generating modified lymphocytes and a kit.



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