

Title (en)

ANTIBODIES THAT TARGET HLA-E-HOST PEPTIDE COMPLEXES AND USES THEREOF

Title (de)

AUF HLA-E-WIRT-PEPTIDKOMPLEXE GERICHTETE ANTIKÖRPER UND VERWENDUNGEN DAVON

Title (fr)

ANTICORPS CIBLANT DES COMPLEXES PEPTIDIQUES HLA-E-HÔTE ET LEURS UTILISATIONS

Publication

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Application

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Abstract (en)

[origin: WO2023023663A1] The present invention provides affinity matured recombinant monoclonal antibodies (mAbs) and fragments that bind specifically to an HLA-E- peptide complex, including HLA-E-VL9 complexes, and. regulate the cytotoxicity effector cell function of NK and/or CD8+ T-cells positive for cell-surface expression of NKG2A ("NKG2A+"). Herein, monoclonal antibodies were recombinant.ly derived from isolated functional HLA-E- VL9-specific mAbs from HLA-E- VL9 peptide- immunized HLA-B transgenic mice and from the naive human B cell repertoire. Such antibodies are capable of regulating effector cell cytotoxicity' and can preferentially recognize HLA-E- VL9 peptide complexes expressed on the surface of tumor cells. The monoclonal antibodies were subject to one or more rounds of affinity7 maturation. The invention provides methods for using affinity matured HLA-E- VL9 mAbs to modulate NK and/or CD8+T- cell function as part of immunotherapeutic strategies.

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