

Anti-HLA-A1:MAGE-A1 complex [HYB3] Bulk Size Ab03088-3.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric mouse antibody was made using the variable domain sequences of the original Human Fab format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Mouse IgG2b, Fc Silent™, Lambda

Clone Number: HYB3

Alternative Name(s) of Target: human leukocyte antigen (HLA)/peptide complex HLA-A1·MAGE-A1; tumor-associated HLA-A1·melanoma-associated antigen (MAGE)-A1 complex

UniProt Accession Number of Target Protein:

Published Application(s): functional assay, ELISA, FC

Published Species Reactivity: Human

Immunogen: This antibody was raised by panning against the L chain-shuffling library raised by cloning the G8 VH gene into a vector containing a library of human Ab kappa and lambda L chains.

Specificity: This antibody is specific for human HLA-A1:MAGE-A1 complex.

Application Notes: The structure of the fab version of this antibody in complex with HLA-A1 and MAGE-A1 was elucidated using X-ray crystallography. This was done to determine how the antibody binds to its ligand (Hülsmeier et al, 2005; pmid:15537658). To characterize this antibody flow cytometry was preformed. Flow cytometry was preformed with the fab version of this antibody on dendritic cells (Chames et al, 2002; pmid:12097420). To assess the expression of low and high affinity scFv-y CD28 and scFv-receptors on gene-transduced primary human T lymphocytes. Flow cytometry was preformed on gene-transduced primary human T lymphocytes using the scFv version of this antibody. Furthermore a cytotoxic assay was preformed on scFv-y + CD28 or scFv-transduced human T lymphocytes. The cytotoxic assay was preformed using Cr51 release assay (Willemsen et al, 2005; pmid:15944290). To characterize this antibody after expressing the antibody in E.coli. An ELISA was preformed using the fab version of this antibody on a biotinylated M1/A1 complex. Furthermore to asses the ability of this antibody to bind M1/A1-positive cells. Flow cytometry was preformed on these cells using the scFv version of this antibody (Saeed et al, 2016; pmid:27022262).

Antibody First Published in: Willemsen et al. A major histocompatibility complex-peptide-restricted

antibody and t cell receptor molecules recognize their target by distinct binding modes: crystal structure of human leukocyte antigen (HLA)-A1-MAGE-A1 in complex with FAB-HYB3. J Immunol. 2005 Jun 15;174(12):7853-8. [PMID:15944290](#)

Note on publication: It was analyzed whether linking the CD28 costimulation structure to it (gamma + CD28) could affect the levels of MHC-restricted cytotoxicity and/or cytokine production.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.