

ARG54212 anti-HLA G antibody [87G]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [87G] recognizes HLA G
Tested Reactivity	Hu
Species Does Not React With	Ms, Rat
Tested Application	CyTOF®-candidate, ELISA, FACS, FuncSt, IHC-Fr
Specificity	The clone 87G recognizes both membrane-bound and soluble forms of HLA-G (HLA-G1 and HLA-G5). HLA-G belongs to the MHC Class I molecules (MHC Class Ib; nonclassical) and it is expressed on the surface of trophoblast cells. 87G blocks interaction of HLA-G with inhibitory receptors.
Host	Mouse
Clonality	Monoclonal
Clone	87G
Isotype	IgG2a
Target Name	HLA G
Species	Human
Immunogen	HLA-B27 transgenic mice were immunized with H-2 identical murine cells transfected with and expressing genes encoding HLA-G and human beta2-microglobulin.
Conjugation	Un-conjugated
Alternate Names	HLA G antigen; MHC class I antigen G; HLA class I histocompatibility antigen, alpha chain G; MHC-G

Application Instructions

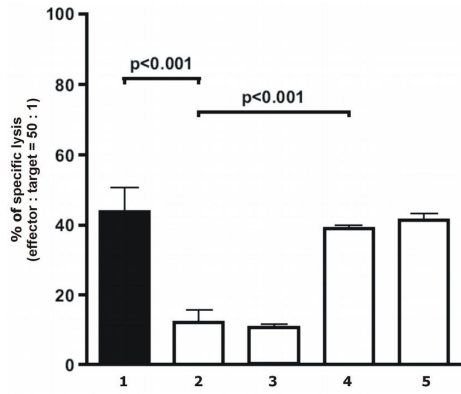
Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	ELISA	1 µg/ml
	FACS	2 µg/ml
	FuncSt	Assay-dependent
	IHC-Fr	10 µg/ml
Application Note	IHC-Fr: Incubated for 20 min at 25°C. ELISA: The clone 87G has been tested as the capture antibody in a sandwich ELISA for analysis of human HLA-G in combination with antibody W6/32. Functional studies: The clone 87G blocks interaction of HLA-G with inhibitory receptors. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	FACS and ELISA: JEG-3 human choriocarcinoma epithelial cells IHC-Fr: extravillous cytotrophoblast	

Properties

Form	Liquid
Purification	Purified from cell culture supernatant by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 3135 Human Swiss-port # P17693 Human
Gene Symbol	HLA-G
Gene Full Name	major histocompatibility complex, class I, G
Background	HLA-G belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. HLA-G is expressed on fetal derived placental cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domain, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region, and exon 6 encodes the cytoplasmic tail. [provided by RefSeq, Jul 2008]
Function	Involved in the presentation of foreign antigens to the immune system. Plays a role in maternal tolerance of the fetus by mediating protection from the deleterious effects of natural killer cells, cytotoxic T-lymphocytes, macrophages and mononuclear cells. [UniProt]
Highlight	Related products: HLA G antibodies; Anti-Mouse IgG secondary antibodies; Related news: CyTOF-candidate Antibodies
Research Area	Immune System antibody
Calculated Mw	38 kDa



ARG54212 anti-HLA G antibody [87G] Functional study image

Functional study: Analysis of cytolytical activity of Human polyclonal NK cells on target melanoma cells (M8 cell line) transfected with empty vector (Lane 1) or HLA-G1 cDNA (Lane 2-6). Blocking antibodies: Lane (1,2): none Lane (3): Isotype Mouse IgG2a control Lane (4): ARG54212 anti-HLA G antibody [87G] (5): F(ab')₂ fragment of ARG54212.