ARG10096
anti-HLA G antibody [87G] (Biotin)

Package: 50 µg
Store at: 4°C

Summary

Product Description	Biotin-conjugated Mouse Monoclonal antibody [87G] recognizes HLA G
Tested Reactivity	Hu
Species Does Not React With	Ms, Rat
Tested Application	ELISA, FACS
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 imunized with H-2 identical murine cells transfected with and expressing genes encoding HLA-G and human beta2-microglobulin.
Conjugation	Biotin
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
ELISA	Assay-dependent
FACS	1 - 3 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

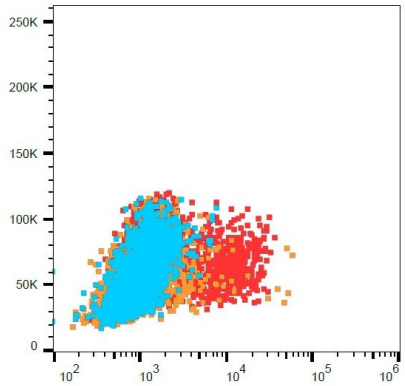
Form	Liquid
Purification Note	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml

Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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]
Research Area	Immune System antibody
Calculated Mw	38 kDa

Images



ARG10096 anti-HLA G antibody [87G] (Biotin) FACS image

Flow Cytometry: HLA-G transfectants (red) compared with K562 cells (orange) and blank (blue). Samples were stained with ARG10096 anti-HLA G antibody [87G] (Biotin), followed by Streptavidin (PE).