ARG10111
anti-HLA G antibody [G233]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [G233] recognizes HLA G
Tested Reactivity	Hu
Tested Application	ELISA, FACS, IP
Specificity	The clone G233 recognizes several isoforms of HLA-G expressed in all populations of extravillous trophoblast (cell columns, interstitial trophoblast, endovascular trophoblast, placental bed giant cells). HLA-G belongs to the nonclassical MHC Class I molecules (MHC Class Ib). G233 has been found not to cross-react with any other MHC Class I antigens (HLA-A, -B, -C, -E, -F).
Host	Mouse
Clonality	Monoclonal
Clone	G233
Isotype	IgG2a
Target Name	HLA G
Species	Human
Immunogen	HLA-A2.1/human beta2-microglobulin double transgenic mice were immunized with murine L cells transfected with both human beta2-microglobulin and HLA-G.
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
ELISA	Assay-dependent
FACS	1 - 4 µg/ml
IP	Assay-dependent

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

Properties

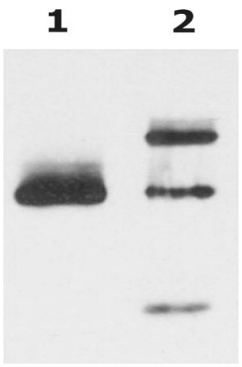
Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide

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

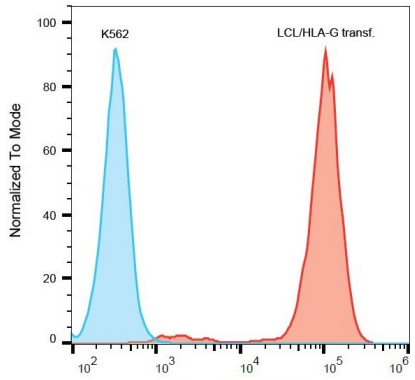
Database links	GeneID: 3135 Human Swiss-port # P17693 Human
Gene Symbol	HLA-G
Gene Full Name	major histocompatibility complex, class I, G
Background	HLA-G belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). 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]
Research Area	Immune System antibody
Calculated Mw	38 kDa

Images



ARG10111 anti-HLA G antibody [G233] IP image

Immunoprecipitation: HLA-G from HLA-G1 transfectants (LCL-HLA-G1) immunoprecipitated by ARG10106 anti-HLA G antibody [MEM-G/9] and protein G. HLA-G was stained with ARG10111 anti-HLA G antibody [G233] in cell lysate (Lane 1) and in the immunoprecipitate (Lane 2).



ARG10111 anti-HLA G antibody [G233] FACS image

Flow Cytometry: HLA-G transfectants stained with ARG10111 anti-HLA G antibody [G233], followed by APC-conjugated Goat anti-Mouse antibody.