ARG67037
anti-HLA G antibody [SQab30313]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Recombinant rabbit Monoclonal antibody [SQab30313] recognizes HLA G
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Rabbit
Clonality	Monoclonal
Clone	SQab30313
Isotype	IgG
Target Name	HLA G
Species	Human
Immunogen	Recombinant protein of Human HLA G.
Conjugation	Un-conjugated
Alternate Names	HLA-G, Major Histocompatibility Complex, Class I, G, HLA Class I Histocompatibility Antigen, Alpha Chain G, HLA-G Histocompatibility Antigen, Class I, G, MHC Class I Antigen G, B2 Microglobulin, HLA G Antigen, Mutant MHC Class Ib Antigen, Mutant MHC Class I Antigen, MHC Class Ib Antigen, HLA-6.0, MHC-G, HLAG

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:100

Application Note	The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Human placenta

Properties

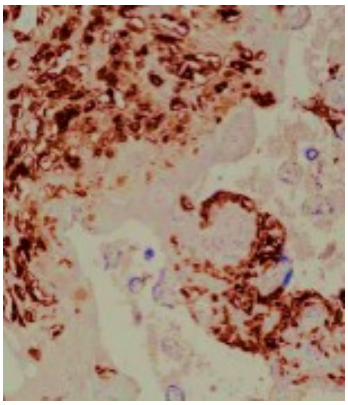
Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05%BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05%BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot 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

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	Non-classical major histocompatibility class Ib molecule involved in immune regulatory processes at the maternal-fetal interface. In complex with B2M/beta-2 microglobulin binds a limited repertoire of nonamer self-peptides derived from intracellular proteins including histones and ribosomal proteins.Peptide-bound HLA-G-B2M complex acts as a ligand for inhibitory/activating KIR2DL4, LILRB1 and LILRB2 receptors on uterine immune cells to promote fetal development while maintaining maternal-fetal tolerance.Upon interaction with KIR2DL4 and LILRB1 receptors on decidual NK cells, it triggers NK cell senescence-associated secretory phenotype as a molecular switch to promote vascular remodeling and fetal growth in early pregnancy. [Uniprot]
Calculated Mw	38 kDa
PTM	N-glycosylated.1 Publication. Soluble HLA class I histocompatibility antigen, alpha chain G Produced by proteolytic cleavage at the cell surface (shedding) by matrix metalloproteinase MMP2. [Uniprot]
Cellular Localization	Cell membrane, Cell projection, Endoplasmic reticulum, Endosome, Membrane

Images



ARG67037 anti-HLA G antibody [SQab30313] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded human placenta stained with ARG67037 anti-HLA G antibody [SQab30313].