

**Anti-HLA G Rabbit Monoclonal Antibody**  
Catalog # ABO13750**Specification**

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**Anti-HLA G Rabbit Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P17693</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-HLA G Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human.

**Anti-HLA G Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 3135

**Other Names**

HLA class I histocompatibility antigen, alpha chain G, HLA G antigen, MHC class I antigen G, Soluble HLA class I histocompatibility antigen, alpha chain G, sHLA-G, HLA-G  
{ECO:0000303|PubMed:1570318, ECO:0000312|HGNC:HGNC:4964}

**Calculated MW**

38224 MW KDa

**Application Details**

WB 1:500-1:2000

**Subcellular Localization**

Membrane; Single-pass type I membrane protein.

**Tissue Specificity**

Expressed in trophoblasts.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human HLA G

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

up to one month. Avoid repeated  
freeze-thaw cycles.

## Anti-HLA G Rabbit Monoclonal Antibody - Protein Information

**Name** HLA-G {ECO:0000303|PubMed:1570318, ECO:0000312|HGNC:HGNC:4964}

### Function

[Isoform 1]: Non-classical major histocompatibility class Ib molecule involved in immune regulatory processes at the maternal-fetal interface (PubMed:<a href="http://www.uniprot.org/citations/19304799" target="\_blank">19304799</a>, PubMed:<a href="http://www.uniprot.org/citations/23184984" target="\_blank">23184984</a>, PubMed:<a href="http://www.uniprot.org/citations/29262349" target="\_blank">29262349</a>). In complex with B2M/beta-2 microglobulin binds a limited repertoire of nonamer self-peptides derived from intracellular proteins including histones and ribosomal proteins (PubMed:<a href="http://www.uniprot.org/citations/7584149" target="\_blank">7584149</a>, PubMed:<a href="http://www.uniprot.org/citations/8805247" target="\_blank">8805247</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/16366734" target="\_blank">16366734</a>, PubMed:<a href="http://www.uniprot.org/citations/19304799" target="\_blank">19304799</a>, PubMed:<a href="http://www.uniprot.org/citations/20448110" target="\_blank">20448110</a>, PubMed:<a href="http://www.uniprot.org/citations/23184984" target="\_blank">23184984</a>, PubMed:<a href="http://www.uniprot.org/citations/27859042" target="\_blank">27859042</a>, PubMed:<a href="http://www.uniprot.org/citations/29262349" target="\_blank">29262349</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/16366734" target="\_blank">16366734</a>, PubMed:<a href="http://www.uniprot.org/citations/19304799" target="\_blank">19304799</a>, PubMed:<a href="http://www.uniprot.org/citations/23184984" target="\_blank">23184984</a>, PubMed:<a href="http://www.uniprot.org/citations/29262349" target="\_blank">29262349</a>). Through interaction with KIR2DL4 receptor on decidual macrophages induces pro-inflammatory cytokine production mainly associated with tissue remodeling (PubMed:<a href="http://www.uniprot.org/citations/19304799" target="\_blank">19304799</a>). Through interaction with LILRB2 receptor triggers differentiation of type 1 regulatory T cells and myeloid-derived suppressor cells, both of which actively maintain maternal-fetal tolerance (PubMed:<a href="http://www.uniprot.org/citations/20448110" target="\_blank">20448110</a>, PubMed:<a href="http://www.uniprot.org/citations/27859042" target="\_blank">27859042</a>). May play a role in balancing tolerance and antiviral-immunity at maternal-fetal interface by keeping in check the effector functions of NK, CD8+ T cells and B cells (PubMed:<a href="http://www.uniprot.org/citations/10190900" target="\_blank">10190900</a>, PubMed:<a href="http://www.uniprot.org/citations/11290782" target="\_blank">11290782</a>, PubMed:<a href="http://www.uniprot.org/citations/24453251" target="\_blank">24453251</a>). Reprograms B cells toward an immune suppressive phenotype via LILRB1 (PubMed:<a href="http://www.uniprot.org/citations/24453251" target="\_blank">24453251</a>). May induce immune activation/suppression via intercellular membrane transfer (trocytosis), likely enabling interaction with KIR2DL4, which resides mostly in endosomes (PubMed:<a href="http://www.uniprot.org/citations/20179272" target="\_blank">20179272</a>, PubMed:<a href="http://www.uniprot.org/citations/26460007" target="\_blank">26460007</a>). Through interaction with the inhibitory receptor CD160 on endothelial cells may control angiogenesis in immune privileged sites (PubMed:<a href="http://www.uniprot.org/citations/16809620" target="\_blank">16809620</a>).

### Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum

membrane. Early endosome membrane [Isoform 2]: Cell membrane; Single-pass type I membrane protein [Isoform 4]: Cell membrane; Single-pass type I membrane protein [Isoform 6]: Secreted Cell projection, filopodium membrane. Note=HLA-G trogocytosis from extravillous trophoblast's filopodia occurs in the majority of decidual NK cells.

#### Tissue Location

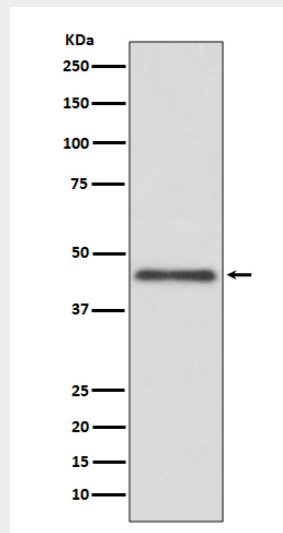
Expressed in adult eye (PubMed:1570318). Expressed in immune cell subsets including monocytes, myeloid and plasmacytoid dendritic cells and regulatory T cells (Tr1)(at protein level) (PubMed:20448110). Secreted by follicular dendritic cell and follicular helper T cells (PubMed:24453251) [Isoform 7]: Expressed in placenta, amniotic membrane, skin, cord blood and peripheral blood mononuclear cells

#### Anti-HLA G Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-HLA G Rabbit Monoclonal Antibody - Images



Western blot analysis of HLA G expression in Jurkat cell lysate.