

**HLA G Rabbit mAb**  
Catalog # AP77617**Specification****HLA G Rabbit mAb - Product Information**

Application	WB
Primary Accession	<a href="#">P17693</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	38224

**HLA G Rabbit mAb - Additional Information**

Gene ID 3135

**Other Names**

HLA-G

**Dilution**

WB~~1/500-1/1000

**Format**

Liquid

**HLA G Rabbit mAb - 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: [19304799](http://www.uniprot.org/citations/19304799), PubMed: [23184984](http://www.uniprot.org/citations/23184984), PubMed: [29262349](http://www.uniprot.org/citations/29262349)). 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: [7584149](http://www.uniprot.org/citations/7584149), PubMed: [8805247](http://www.uniprot.org/citations/8805247)). 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: [16366734](http://www.uniprot.org/citations/16366734), PubMed: [19304799](http://www.uniprot.org/citations/19304799), PubMed: [20448110](http://www.uniprot.org/citations/20448110), PubMed: [23184984](http://www.uniprot.org/citations/23184984), PubMed: [27859042](http://www.uniprot.org/citations/27859042), PubMed: [29262349](http://www.uniprot.org/citations/29262349)). 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 trocytosis 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

#### HLA G Rabbit mAb - 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](#)

#### HLA G Rabbit mAb - Images

