

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

Application	WB
Primary Accession	P17693
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:16366734, PubMed:19304799, PubMed:23184984, PubMed:29262349). Through interaction with KIR2DL4 receptor on decidual macrophages induces pro-inflammatory cytokine production mainly associated with tissue remodeling (PubMed:19304799). 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:20448110, PubMed:27859042). 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:10190900, PubMed:11290782, PubMed:24453251). Reprograms B cells toward an immune suppressive phenotype via LILRB1 (PubMed:24453251). May induce immune activation/suppression via intercellular membrane transfer (troglucytosis), likely enabling interaction with KIR2DL4, which resides mostly in endosomes (PubMed:20179272, PubMed:26460007). Through interaction with the inhibitory receptor CD160 on endothelial cells may control angiogenesis in immune privileged sites (PubMed:16809620).

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 troglucytosis 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

