

HLA-G antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI14920**Specification**

HLA-G antibody - C-terminal region - Product Information

Application	WB
Primary Accession	P17693
Other Accession	NM_002127 , NP_002118
Reactivity	Human, Pig, Bovine
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36kDa KDa

HLA-G antibody - C-terminal region - Additional Information**Gene ID** 3135**Alias Symbol** MHC-G
Other Names

HLA class I histocompatibility antigen, alpha chain G, HLA G antigen, MHC class I antigen G, HLA-G, HLA-6.0, HLAG

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-HLA-G antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

HLA-G antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

HLA-G antibody - C-terminal region - 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:[7584149](http://www.uniprot.org/citations/7584149)).

<http://www.uniprot.org/citations/8805247> target="_blank">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, PubMed:19304799, PubMed:20448110, PubMed:23184984, PubMed:27859042, PubMed: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

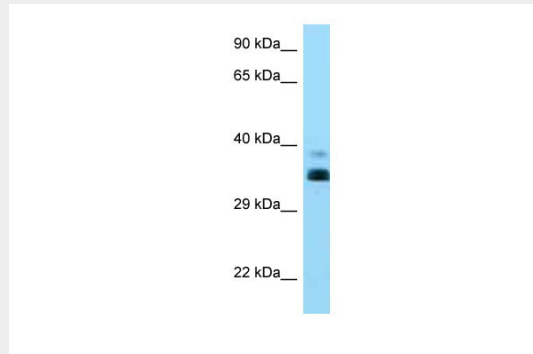
Expressed in adult eye (PubMed:1570318). Expressed in immune cell subsets including monocytes, myeloid and plasmacytoid dendritic cells and regulatory T cells (Tr1)(at protein level) (PubMed:20448110). Secreted by follicular dendritic cell and follicular helper T cells (PubMed:24453251) [Isoform 7]: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

HLA-G antibody - C-terminal region - 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 antibody - C-terminal region - Images



WB Suggested Anti-HLA-G Antibody Titration: 1.0 μ g/ml

Positive Control: RPMI-8226 Whole Cell. HLA-G is strongly supported by BioGPS gene expression data to be expressed in RPMI-8226

HLA-G antibody - C-terminal region - References

- Shukla H., et al. Nucleic Acids Res. 18:2189-2189(1990).
Geraghty D.E., et al. Proc. Natl. Acad. Sci. U.S.A. 84:9145-9149(1987).
Ishitani A., et al. Submitted (APR-1992) to the EMBL/GenBank/DDBJ databases.
Hampe A., et al. DNA Seq. 10:263-299(1999).
Shiina S., et al. Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.