

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

### Specification

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

Application	WB
Primary Accession	<a href="#">P17693</a>
Other Accession	<a href="#">NM_002127</a> , <a href="#">NP_002118</a>
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	<b>MHC-G</b>
<b>Other Names</b>	
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:<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/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>).

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 (trogocytosis), 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.

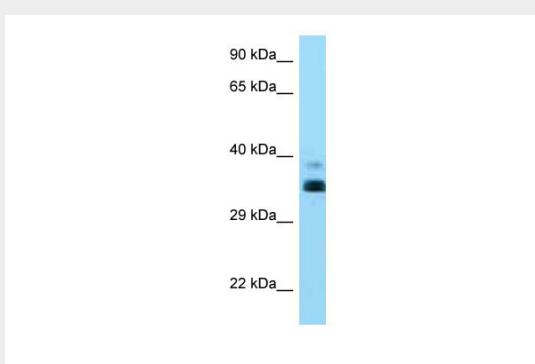
### Tissue Location

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

### 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 µg/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.