

**HLA-F Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8681b****Specification**

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**HLA-F Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">P30511</a>
Reactivity	Human
Predicted	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1, $\kappa$

**HLA-F Antibody - Additional Information****Gene ID** 3134**Other Names**

HLA class I histocompatibility antigen, alpha chain F, CDA12, HLA F antigen, Leukocyte antigen F, MHC class I antigen F, HLA-F, HLA-5.4, HLA-F

**Target/Specificity**

This HLA-F antibody is generated from a mouse immunized with a recombinant protein from the human region of human HLA-F.

**Dilution**

WB~~1:2000

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

HLA-F Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**HLA-F Antibody - Protein Information****Name** HLA-F

**Function** Non-classical major histocompatibility class Ib molecule postulated to play a role in immune surveillance, immune tolerance and inflammation. Functions in two forms, as a heterotrimeric complex with B2M/beta-2 microglobulin and a peptide (peptide-bound HLA-F-B2M) and as an open conformer (OC) devoid of peptide and B2M (peptide-free OC). In complex with

B2M, presents non-canonical self-peptides carrying post- translational modifications, particularly phosphorylated self-peptides. Peptide-bound HLA-F-B2M acts as a ligand for LILRB1 inhibitory receptor, a major player in maternal-fetal tolerance. Peptide-free OC acts as a ligand for KIR3DS1 and KIR3DL2 receptors (PubMed:[28636952](#)). Upon interaction with activating KIR3DS1 receptor on NK cells, triggers NK cell degranulation and anti-viral cytokine production (PubMed:[27455421](#)). Through interaction with KIR3DL2 receptor, inhibits NK and T cell effector functions (PubMed:[24018270](#)). May interact with other MHC class I OCs to cross-present exogenous viral, tumor or minor histocompatibility antigens to cytotoxic CD8+ T cells, triggering effector and memory responses (PubMed:[23851683](#)). May play a role in inflammatory responses in the peripheral nervous system. Through interaction with KIR3DL2, may protect motor neurons from astrocyte-induced toxicity (PubMed:[26928464](#)).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Early endosome membrane. Lysosome membrane. Note=For cross-presentation transits from the cell surface through endosomal pathway to lysosomes, where the peptide is generated from internalized exogenous antigen

#### **Tissue Location**

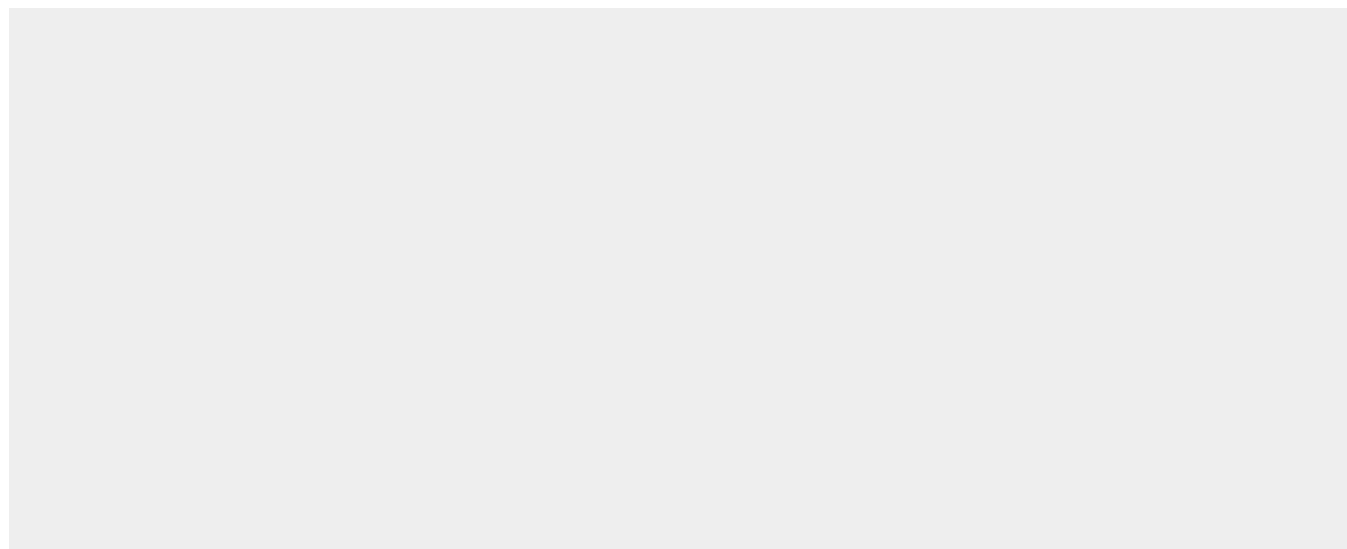
Expressed in resting B cells (at protein level). Expressed in secondary lymphoid organs rich in B and T cells such as the tonsils, spleen, and thymus (at protein level) (PubMed:10605026, PubMed:11169396). Expressed in the endothelial cells of the tonsils (PubMed:11169396). Expressed on activated lymphoid cells including B cells, NK cells, CD4+ T cells and memory T cells (at protein level) (PubMed:27455421, PubMed:20865824). Expressed in motor neurons of spinal cord (PubMed:26928464).

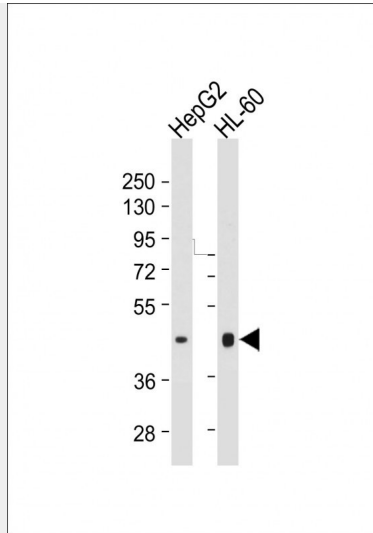
#### **HLA-F Antibody - Protocols**

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

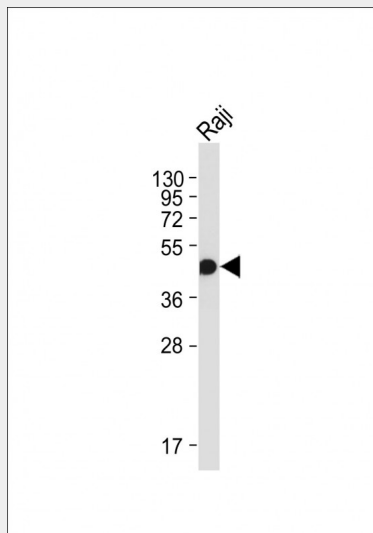
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **HLA-F Antibody - Images**





All lanes : Anti-HLA-F Antibody at 1:1000 dilution Lane 1: HL-60 whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-HLA-F Antibody at 1:2000 dilution + Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### HLA-F Antibody - Background

Involved in the presentation of foreign antigens to the immune system.

### HLA-F Antibody - References

- Geraghty D.E.,et al.J. Exp. Med. 171:1-18(1990).
- Lury D.,et al.Int. Immunol. 2:531-537(1990).
- Hampe A.,et al.DNA Seq. 10:263-299(1999).
- He X.,et al.Tissue Antigens 63:181-183(2004).
- Pyo C.W.,et al.Immunogenetics 58:241-251(2006).