

HLA-F Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8705b

Specification

HLA-F Antibody - Product Information

Primary Accession	P30511
Reactivity	Human
Predicted	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,κ

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.

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:20865824, PubMed:27455421). 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

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).