

# HLA-F Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8705b

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P30511</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1, $\kappa$
<b>Clone Names</b>	2010CT523.67.51
<b>Calculated MW</b>	39062

## Additional Information

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<b>Gene ID</b>	3134
<b>Other Names</b>	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
<b>Target/Specificity</b>	This HLA-F antibody is generated from a mouse immunized with a recombinant protein from the human region of human HLA-F.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	HLA-F Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	HLAF
<b>Function</b>	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).

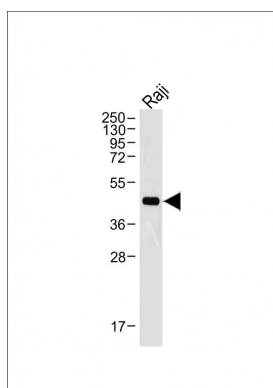
### Background

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

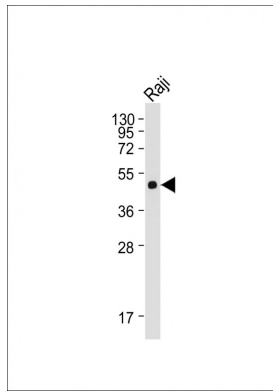
### References

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 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).

### Images



Anti-HLA-F Antibody at 1:1000 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.



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.