

#### **HLA F Rabbit mAb**

**Catalog # AP78428** 

# **Specification**

#### **HLA F Rabbit mAb - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB
P30511
Human
Rabbit
Monoclonal Antibody
39062

#### **HLA F Rabbit mAb - Additional Information**

**Gene ID 3134** 

Other Names HLA-F

**Dilution** WB~~1/500-1/1000

Format Liquid

### **HLA F Rabbit mAb - Protein Information**

# **Name HLAF**

### **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:<a href="http://www.uniprot.org/citations/28636952" target=" blank">28636952</a>). Upon interaction with activating KIR3DS1 receptor on NK cells, triggers NK cell degranulation and anti-viral cytokine production (PubMed: <a href="http://www.uniprot.org/citations/27455421" target=" blank">27455421</a>). Through interaction with KIR3DL2 receptor, inhibits NK and T cell effector functions (PubMed: <a href="http://www.uniprot.org/citations/24018270" target=" blank">24018270</a>). May interact with other MHC class I OCs to cross-present exogenous viral, tumor or minor histompatibility antigens to cytotoxic CD8+ T cells, triggering effector and memory responses (PubMed: <a href="http://www.uniprot.org/citations/23851683" target=" blank">23851683</a>). 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: <a



href="http://www.uniprot.org/citations/26928464" target=" blank">26928464</a>).

### **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 Rabbit mAb - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **HLA F Rabbit mAb - Images**

