

## **HLA-F Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5881c

# **Specification**

# **HLA-F Antibody (Center) - Product Information**

Application WB,E
Primary Accession P30511

Other Accession NP 001091948.1, NP 061823.2

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Antigen Region
Rabbit IgG
172-198

# **HLA-F Antibody (Center) - 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-54, HLAF

### Target/Specificity

This HLA-F antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 172-198 amino acids from the Central region of human HLA-F.

#### **Dilution**

WB~~1:2000

# **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **HLA-F Antibody (Center) - 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



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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 histompatibility 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 astrocyteinduced 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).

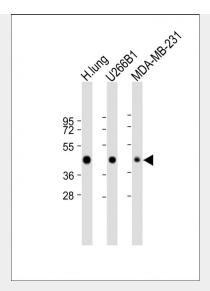
# **HLA-F Antibody (Center) - Protocols**

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 Antibody (Center) - Images**





All lanes : Anti-HLA-F Antibody (Center) at 1:2000 dilution Lane 1: Human lung lysate Lane 2: U266B1 whole cell lysate Lane 3: MDA-MB-231 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.