

# Anti-HLA F Rabbit Monoclonal Antibody

Catalog # ABO15949

### Specification

# Anti-HLA F Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC
Primary Accession	<u>P30511</u>
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	
Anti-HLA F Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with	
Human.	

## Anti-HLA F Rabbit Monoclonal 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, HLAF

Calculated MW 42 kDa KDa

Application Details WB 1:500-1:2000<br>HC 1:50-1:200

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human HLA F

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

### Anti-HLA F Rabbit Monoclonal Antibody - 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).

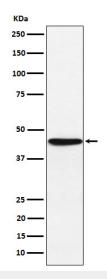
# Anti-HLA F Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-HLA F Rabbit Monoclonal Antibody - Images





Western blot analysis of HLA F expression in JAR cell lysate.