

HLA F Antibody

Rabbit mAb

Catalog # AP92532

Product Information

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|--------------------------|------------------------|
| Application | WB, IHC |
| Primary Accession | P30511 |
| Reactivity | Human |
| Clonality | Monoclonal |
| Other Names | HLAF; |
| Isotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 39062 |

Additional Information

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|-------------------------------------|---|
| Dilution | WB 1:500~1:2000 IHC 1:50~1:200 |
| Purification | Affinity-chromatography |
| Immunogen | A synthesized peptide derived from human HLA F |
| Description | Involved in the presentation of foreign antigens to the immune system. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

Protein Information

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|-----------------|---|
| 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: 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](#)).

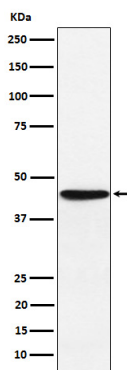
Cellular Location

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).

Images



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

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