

HLA-F Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP5881c**Specification**

HLA-F Antibody (Center) Blocking peptide - Product InformationPrimary Accession
Other Accession[P30511](#)
[NP_001091948.1](#), [NP_061823.2](#)**HLA-F Antibody (Center) Blocking peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HLA-F Antibody (Center) Blocking peptide - 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: [28636952](http://www.uniprot.org/citations/28636952)). Upon interaction with activating KIR3DS1 receptor on NK cells, triggers NK cell degranulation and anti-viral cytokine production (PubMed: [27455421](http://www.uniprot.org/citations/27455421)). Through interaction with KIR3DL2 receptor, inhibits NK and T cell effector functions (PubMed: [24018270](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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:27455421, PubMed:20865824). Expressed in motor neurons of spinal cord (PubMed:26928464).

HLA-F Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

HLA-F Antibody (Center) Blocking peptide - Images