



## Mouse Anti-HLA-F monoclonal antibody, clone 4E22 (CABT-RM146)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Specificity</b>	Specifically detects human HLA-F. It targets an epitope within the alpha 2 domain from the N-terminal half.
<b>Target</b>	HLAF
<b>Immunogen</b>	Full-length human recombinant HLA-F Heavy chains (excluding the signal sequence).
<b>Isotype</b>	IgG1, κ
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	4E22
<b>Purification</b>	Protein G purified
<b>Conjugate</b>	unconjugated
<b>Applications</b>	ELISA, FC, IHC, WB
<b>Molecular Weight</b>	39.06 kDa calculated.
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
<b>Preservative</b>	0.05% sodium azide

**Storage**

Stable for 1 year at 2-8°C from date of receipt.

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## BACKGROUND

**Introduction**

HLA class I histocompatibility antigen, alpha chain F is encoded by the HLA-F gene in human. HLA-F is a single-pass type I membrane heterodimeric protein that is involved in the presentation of foreign antigens to the immune system. It is expressed in B cells, NK cells, monocytes, and T cells and its expression is reported to be coincident with the activated immune response. It is mainly localized in the endoplasmic reticulum and Golgi apparatus, with a small amount present at the cell surface in some cell types. It is synthesized with a signal peptide (aa 1-21), which is subsequently cleaved off. The mature form has an extracellular domain (aa 22-305), a transmembrane domain (aa 306-329), and a short cytoplasmic domain (aa 330-346). The HLA-F locus has very low allelic polymorphism and is highly conserved in distantly related non-human primates indicating its conserved function. It is involved in the regulation of immune system in pregnancy, infection, and autoimmunity by signaling through NK cell receptors.

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**Keywords**

HLA class I histocompatibility antigen, alpha chain F; CDA12; HLA F; HLA-F; HLA-5.4; Leukocyte antigen F; MHC class I antigen F

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## GENE INFORMATION

**Entrez Gene ID**

[3134](#)

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**UniProt ID**

[P30511](#)

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