



Mouse Anti-HLAF monoclonal antibody, clone 4E22 (CABT-RM146)

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

PRODUCT INFORMATION

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

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.

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

GENE INFORMATION

Entrez Gene ID

[3134](#)

UniProt ID

[P30511](#)
