

Recombinant Full Length Human HLA-B Protein, C-Flag-tagged

Cat. No. HLA-B-242HFL Lot. No. (See product label)

SPECIFICATION

Product Overview

Recombinant Full Length Human HLA-B Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.

Species

Human

Source

Mammalian Cells

Description

HLA-B belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exon 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region and exons 6 and 7 encode the cytoplasmic tail. Polymorphisms within exon 2 and exon 3 are responsible for the peptide binding specificity of each class one molecule. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. Hundreds of HLA-B alleles have been described.

Form

25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.

Molecular Mass

37.8 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AA Sequence	<p>MLVMAPRTVLLLLSAALALTETWAGSHSMRYFDTAMSRPGRGEPFISVGYVDDTQ FVRFDSDAASPREE PRAPWIEQEGPEYWRNTQIFKTNTQTDRESLRNLRGYYNQ SEAGSHTLQSMYGCDVGPDRLLRGHNQY AYDGKDYIALNEDLRSWTAADTAAQI TQRKWEAARVAEQDRAYLEGTCVEWLRRLRYLENGKDTLERADPPK THVTHHPISDH EATLRCWALGFYPAEITLTWQRDGEDQTQDTELVETRPAGDRTFQKWAAVVPSG EEQR YTCHVQHEGLPKPLTLRWEPPSSQSTVPIVGIVAGLAVLAVVVIGAVVAVMCR RKSSGGKGGSYSQAACS DSAQGSVDVSLTATRTRPLEQKLISEEDLAANDILDYKDDDDKV</p>
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Transmembrane
Protein Pathways	Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, Natural killer cell mediated cytotoxicity, Type I diabetes mellitus, Viral myocarditis
Full Length	Full L.

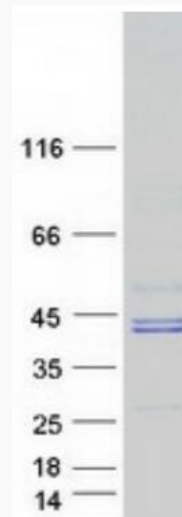
GENE INFORMATION

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Gene Name	HLA-B major histocompatibility complex, class I, B [Homo sapiens (human)]
Official Symbol	HLA-B
Synonyms	AS; HLAB; B-4901
Gene ID	3106
mRNA Refseq	NM_005514.8
Protein Refseq	NP_005505.2
MIM	142830
UniProt ID	P01889



Coomassie blue staining of purified HLA-B protein.

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