

## **Product datasheet for TP310631**

## OriGene Technologies, Inc.

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## HLAB (HLA-B) (NM\_005514) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human major histocompatibility complex, class I, B (HLA-B), 20 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC210631 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MLVMAPRTVLLLLSAALALTETWAGSHSMRYFDTAMSRPGRGEPRFISVGYVDDTQFVRFDSDAASPREE PRAPWIEQEGPEYWDRNTQIFKTNTQTDRESLRNLRGYYNQSEAGSHTLQSMYGCDVGPDGRLLRGHN

QY

AYDGKDYIALNEDLRSWTAADTAAQITQRKWEAARVAEQDRAYLEGTCVEWLRRYLENGKDTLERADPPK THVTHHPISDHEATLRCWALGFYPAEITLTWQRDGEDQTQDTELVETRPAGDRTFQKWAAVVVPSGEEQR YTCHVQHEGLPKPLTLRWEPSSQSTVPIVGIVAGLAVLAVVVIGAVVAAVMCRRKSSGGKGGSYSQAACS

**DSAQGSDVSLTA** 

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK
Predicted MW: 37.8 kDa

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 005505





Locus ID: 3106

**UniProt ID:** P01889 RefSeg Size: 1578 Cytogenetics: 6p21.33 RefSeq ORF: 1086

Synonyms: AS: B-4901: HLAB

**Summary:** 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. [provided by RefSeq, Jul 20081

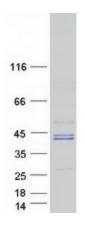
**Protein Families:** Transmembrane

**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

## **Product images:**



Coomassie blue staining of purified HLA-B protein (Cat# TP310631). The protein was produced from HEK293T cells transfected with HLA-B cDNA clone (Cat# [RC210631]) using MegaTran 2.0 (Cat# [TT210002]).