Recombinant Human HLA-A protein, MYC/DDK-tagged

Cat. No. HLA-A-938H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HLA-A fused with MYC/DDK tag at C-terminal was expressed in HEK293.
Species	Human
Source	HEK293
Description	HLA-A 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, exons 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-A alleles have been described.
Form	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Molecular Mass	38.5 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining

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Concentration	>50 ug/mL as determined by microplate BCA method

GENE INFORMATION

Gene Name	HLA-A major histocompatibility complex, class I, A [Homo sapiens]
Official Symbol	HLA-A
Synonyms	HLA-A; major histocompatibility complex, class I, A; HLA class I histocompatibility antigen, A-1 alpha chain; antigen presenting molecule; leukocyte antigen class I-A; MHC class I antigen HLA-A heavy chain; HLAA; FLJ26655;
Gene ID	3105
mRNA Refseq	NM_002116
Protein Refseq	NP_002107
MIM	
UniProt ID	P01891
Chromosome Location	6p21.3
Pathway	Adaptive Immune System, organism-specific biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Antigen Presentation: Folding, assembly and peptide loading of class I MHC, organism-specific biosystem; Antigen processing and presentation, organism-specific biosystem; Antigen processing and presentation, conserved biosystem; Antigen processing-Cross presentation, organism-specific biosystem;

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Function	MHC class I receptor activity; protein binding; receptor binding;

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