

Recombinant Human HLA-C, GST-tagged

Cat. No. HLA-C-13811H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HLA-C protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
Species	Human
Source	E.coli
ProteinLength	28-306a.a.
Description	HLA-C 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 endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domain, 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. Over one hundred HLA-C alleles have been described
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.

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Storage Buffer

1M PBS (58mM Na₂HPO₄, 17mM NaH₂PO₄, 68mM NaCl, pH8.) added with 100mM GSH and 1% Triton X-100, 15% glycerol.

GENE INFORMATION
Gene Name

HLA-C major histocompatibility complex, class I, C [Homo sapiens]

Official Symbol

HLA-C

Synonyms

major histocompatibility complex, class I, C; 4933; Ensembl:ENSG00000204525; FLJ27082; HLA class I histocompatibility antigen, Cw-1 alpha chain; MHC class I antigen heavy chain HLA-C; human leukocyte antigen-C alpha chain; major histocompatibility antigen HLA-C; HLA class I histocompatibility antigen, C alpha chain; HLC-C; D6S204; PSORS1; HLA-JY3

Gene ID

3107

mRNA Refseq

NM_001243042.1

Protein Refseq

NP_001229971.1

MIM

142840

UniProt ID

O19617

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;

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Antigen processing and presentation, organism-specific biosystem; Antigen processing and presentation, conserved biosystem; Antigen processing-Cross presentation, organism-specific biosystem;

Function

MHC class I receptor activity;

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