

# Active Recombinant Human CD8A&CD8B protein, His/FLAG-tagged

**Cat. No.** CD8A&CD8B-211H    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

Recombinant Human CD8A(Ser22-Asp182) fused with His tag at C-terminal and CD8B(Asn19-Pro170) fused with FLAG tag at N-terminal was expressed in HEK293.

### Species

Human

### Source

HEK293

### ProteinLength

22-182 a.a.

### Description

CD8, also known as Ly2 or Leu2, is a heterodimeric glycoprotein (alpha and beta subunits) that functions in conjunction with the T cell receptor in the recognition of MHC class I/peptide complexes. CD8 alpha is expressed on double positive (CD4+ CD8+) thymocytes and mature CD8+ cytolytic T cells (CTL), intraepithelial lymphocytes (IEL), some gamma delta T cells, subsets of thymic and splenic dendritic cells (DC), and peritoneal mast cells. It can form disulfide linked homodimers or heterodimers with CD8 beta. Thymic CD8+ DC express primarily alpha beta heterodimers, while splenic CD8+ DC primarily express alpha alpha homodimers. CD8 alpha + DC can present viral antigenic peptides in complex with MHC I and prime CTL responses. The approximately 35 kDa mature mouse CD8 alpha consists of a 169 amino acid (aa) extracellular domain (ECD) with one Iglike domain, a 21 aa transmembrane segment, and a 30 aa cytoplasmic domain. Within the ECD, mouse CD8 alpha shares 49% and 64% aa sequence identity with human and rat CD8 alpha, respectively.

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<b>Predicted N Terminal</b>	Ser22 (CD8 alpha ) & Asn19 (CD8 beta )
<b>Form</b>	Lyophilized from a 0.2 µm filtered solution in PBS.
<b>Bio-activity</b>	Measured by its ability of the immobilized protein to support the adhesion of Jurkat human acute T cell leukemia cells. Bechard, D. et al. (2001) J. Immunol. 167:3099. The ED50 for this effect is 0.8-4 µg/mL.
<b>Molecular Mass</b>	Predicted Molecular Mass: 26 (CD8 alpha ) & 26 (CD8 beta ) kDa SDS-PAGE: 32-43 kDa, reducing conditions
<b>Endotoxin</b>	<0.1 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
<b>Reconstitution</b>	Reconstitute at 500 µg/mL in PBS.

## GENE INFORMATION

<b>Gene Name</b>	CD8A CD8a molecule [ Homo sapiens ]
<b>Official Symbol</b>	CD8A
<b>Synonyms</b>	CD8; MAL; p32; Leu2

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Gene ID	925
mRNA Refseq	NM_001145873
Protein Refseq	NP_001139345
MIM	186910
UniProt ID	P01732

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