

# Ferret CD8A / CD8 alpha chain Protein (His Tag)

Catalog Number: 60001-F08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CD8A

### Protein Construction:

A DNA sequence encoding the Ferret (*Mustela putorius furo*) CD8A (ABS50091.1) extracellular domain (Met 1-Glu 186) was expressed, with a C-terminal polyhistidine tag.

**Source:** Ferret

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 92 % as determined by SDS-PAGE

### Bio Activity:

**1. Measured by its ability to bind biotinylated recombinant human B2M in a functional ELISA. 2. Measured by its ability to bind biotinylated recombinant human FCGRT+B2M in a functional ELISA. 3. Measured by its ability to bind biotinylated recombinant human LCK in a functional ELISA.**

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Gly 23

### Molecular Mass:

The recombinant Ferret CD8A consists of 175 amino acids and has a calculated molecular mass of 19.5 kDa. The apparent molecular mass of the recombinant protein is approximately 28-33 kDa in SDS-PAGE under reducing conditions due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

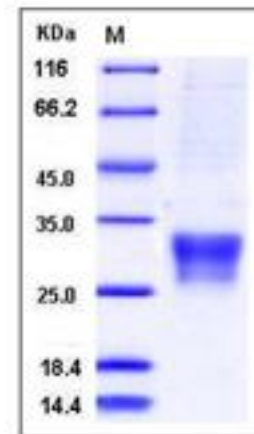
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

T-cell surface glycoprotein CD8 alpha chain, also known as CD8a, is a single-pass type I membrane protein. The CD8 glycoprotein is expressed by thymocytes, mature T cells and natural killer (NK) cells and has been implicated in the recognition of monomorphic determinants on major histocompatibility complex (MHC) Class I antigens, and in signal transduction during the course of T-cell activation. Both human and rodent CD8 antigens are comprised of two distinct polypeptide chains, alpha and beta. The Ig domains of CD8 alpha are involved in controlling the ability of CD8 to be expressed. Mutation of B- and F-strand cysteine residues in CD8 alpha reduced the ability of the protein to fold properly and, therefore, to be expressed. Defects in CD8A are a cause of familial CD8 deficiency. Familial CD8 deficiency is a novel autosomal recessive immunologic defect characterized by absence of CD8+ cells, leading to recurrent bacterial infections.

## References

References Devine, L. et al., 2000, J Immunol. 164 (2): 833-8. Arcaro, A. et al., 2000, J Immunol. 165 (4): 2068-76. Saha, K. et al., 2001, Nat Med. 7 (1): 65-72. Romero, P. et al., 2005, Eur J Immunol. 35 (11): 3092-4.

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