

# Mouse CD83 / HB15 Protein (His Tag)

Catalog Number: 50694-M08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CD83

### Protein Construction:

A DNA sequence encoding the extracellular domain of mouse CD83 (O88324) (Met 1-Arg 133) was expressed, with a C-terminal polyhistidine tag.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### 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:** Met 22

### Molecular Mass:

The secreted recombinant mouse CD83 comprises 123 amino acids and has a calculated molecular mass of 13.6 kDa. As a result of glycosylation, the apparent molecular mass of rm CD83 is approximately 25-35 kDa in SDS-PAGE under reducing conditions.

### 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:

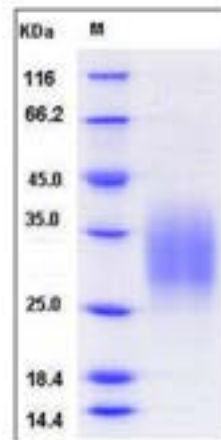
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD83 is considered as a marker of mature dendritic cells as well as an adhesion receptor that binds to resting monocytes and a subset of activated CD8+ T cells. In certain conditions, CD83 tended to dimerize or even multimerize through its aberrant intermolecular disulfide bonds. The injection of CD83-Ig can significantly enhance the rate of tumor growth and inhibit the T cell growth.

## References

- 1.Zola H, *et al.* (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.
- 2.Ho IC, *et al.* (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.
- 3.Matesanz-Isabel J, *et al.* (2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12

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