

# Mouse CD122 / IL2RB / IL2 Receptor beta Protein (His Tag)

Catalog Number: 50792-M08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CD122; IL-15Rbeta; IL-2/15Rbeta; IL-2Rbeta; IL15Rbeta; p70

### Protein Construction:

A DNA sequence encoding the mouse IL2RB (P16297) (Met1-Glu240) was expressed with a C-terminal polyhistidine tag.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** ≥ 90 % as determined by SDS-PAGE. ≥ 95 % as determined by SEC-HPLC.

### Endotoxin:

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

**Predicted N terminal:** Ala 27

### Molecular Mass:

The recombinant mouse IL2RB comprises 225 amino acids and has a predicted molecular mass of 26.5 kDa. The apparent molecular mass of the protein is approximately 45-54 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

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

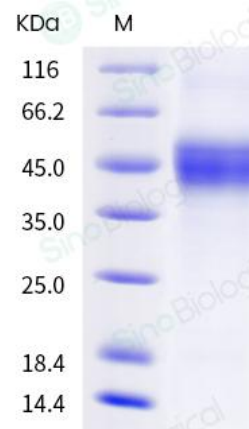
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Interleukin-2 receptor (IL-2R) also known as High-affinity IL-2 receptor subunit beta, IL-2 receptor subunit beta, and IL-2RB, is involved in T cell-mediated immune responses. CD122/IL-2RB is present in 3 forms concerning the ability to bind interleukin 2. The low-affinity form is a monomer of the alpha subunit and is not involved in signal transduction. The intermediate affinity form consists of an alpha/beta subunit heterodimer, while the high-affinity form consists of an alpha/beta/gamma subunit heterotrimer. Both the intermediate and high-affinity forms of CD122/IL-2RB are involved in receptor-mediated endocytosis and transduction of mitogenic signals from interleukin 2. CD122/IL-2RB expression was restricted to the earliest B220+ cells (CD43+CD24-; prepro B cells; fraction A) that proliferate vigorously to IL-2 in the absence of any stromal cells, but not to IL-15. The high-affinity form of this receptor is expressed on activated T lymphocytes, activated B lymphocytes, and activated macrophages. CD122/IL-2RB plays a role in regulating normal lymphocyte development.

## References

1. Foss F. (2006) Clinical experience with denileukin diftitox (ONTAK). *Semin Oncol.* 33(1 Suppl 3): 11-6.
2. Sprent J, *et al.* (2001) T cell death and memory. *Science.* 293(5528): 245-8.
3. Teshigawara K, *et al.* (1987) Interleukin 2 high-affinity receptor expression requires two distinct binding proteins. *J Exp Med.* 165 (1): 223-38.