# Rat CD122 / IL-2RB Protein (His Tag)

Catalog Number: 80340-R08H



## **General Information**

#### Gene Name Synonym:

IL2RB

#### **Protein Construction:**

A DNA sequence encoding the rat IL2RB (NP\_037327.1) (Met1-Glu239) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

**QC** Testing

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

**Endotoxin:** 

< 1.0 EU per  $\mu g$  protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}$ C

Predicted N terminal: Ala 27

**Molecular Mass:** 

The recombinant rat IL2RB consists 224 amino acids and predicts a molecular mass of 26.4 kDa.

## 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:

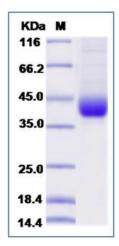
Store it under sterile conditions at  $-20\,^\circ\!\mathrm{C}$  to  $-80\,^\circ\!\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 cellmediated immune responses. CD122/IL-2RB is present in 3 forms with respect to 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.

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