

Rhesus CD122 / IL-2RB Protein (Fc Tag)

Catalog Number: 90328-C02H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

IL2RB

Protein Construction:

A DNA sequence encoding the rhesus IL2RB (NP_001244989.1) (Met1-Asp239) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Rhesus

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE.

Bio Activity:

Measured by its ability to inhibit IL-15-dependent proliferation of MO7e human megakaryocytic leukemic cells in the presence of 4 ng/mL of recombinant human IL-15. The ED₅₀ for this effect is typically 0.4-2.4 µg/mL.

Endotoxin:

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

Predicted N terminal: Ala 27

Molecular Mass:

The recombinant rhesus IL2RB consists of 451 amino acids and predicts a molecular mass of 51.4 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

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.