

Recombinant Protein Technical Manual Recombinant Human CD122/IL-2RB Protein (Fc Tag)(Active) RPES1420

## **Product Data:**

Product SKU: RPES1420

Species: Human

**Size:** 10μg

Expression host: HEK293 Cells

**Uniprot:** NP\_000869.1

Protein	Information:
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Molecular Mass:	51.6 kDa
AP Molecular Mass:	60-65 kDa
Tag:	C-Fc
Bio-activity:	1. Measured by its ability to bind biotinylated recombinant rat IL2 in a functional ELISA.2. Using the Octet RED System, the affinity constant (Kd) of Human IL2RB-Fc bound to Human IL2 was 0.8nM.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	CD122;IL15RB;P70-75

## Sequence: Met 1-Asp 239

## **Background:**

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 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 IL5. 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.