

# Complex Biotech Co., Ltd

# IL-2RB/CD122 Recombinant Protein

Catalog: BCP3372 Host: E.coli Tag: His-tag

#### **BackGround:**

Interleukin-2 (IL-2) is a T cell stimulatory cytokine best known for inducing T cell proliferation and NK cell proliferation and activation. IL-2 also promotes peripheral development of regulatory T cells (Tregs) . Conversely, IL-2 is involved in the activation-induced cell death (AICD) that is observed post T cell expansion by increasing levels of Fas on CD4+ T cells. The effects of IL-2 are mediated through a trimeric receptor complex consisting of IL-2Rα, IL-2Rβ, and the common gamma chain, γc. IL-2Rα binds exclusively to IL-2 with low affinity and increases the binding affinity of the whole receptor complex including IL-2Rβ and γc subunits. IL-15 also binds to IL-2Rβ. γc is used by other cytokines including IL-4, IL-7, IL-9, IL-15, and IL-21. Binding of IL-2 initiates signaling cascades involving Jak1, Jak3, Stat5, and the PI3K/Akt pathways. IL-2Rβ, also known as CD122, is a type I transmembrane protein that is expressed by natural killer cells and certain subsets of T cells in the periphery. IL-2RB surface expression is upregulated following antigen-induced activation. A heteromeric complex composed of IL-2Rβ and yc forms the intermediate affinity IL-2 receptor whereas a complex comprised of all three chains forms the high affinity receptor. Signaling through IL-2RB is mediated by Jak1, which phosphorylates numerous tyrosine residues in the cytoplasmic tail to promote the recruitment of the adaptor Shc to IL-2Rβ and enhance IL-2 receptor signaling.

#### **Product:**

PBS, 4M Urea, PH7.4

# **Molecular Weight:**

~26kDa

# **Swiss-Prot:**

P14784

# **Purification&Purity:**

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

### **Restriction Sites:**

NdeI-XhoI

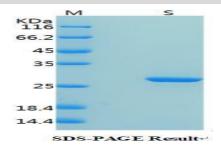
### Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

#### **Expression Vector:**

pet-22b(+)

### **DATA:**



# Note:

For research use only, not for use in diagnostic procedure.