



Recombinant Protein Technical Manual

Recombinant Human CD122/IL-2RB Protein (Active)

RPES1400

Product Data:

Product SKU: RPES1400

Size: 5µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000869.1

Protein Information:

Molecular Mass: 25.2 kDa

AP Molecular Mass: 40 kDa

Tag:

Bio-activity: 1. Measured by its binding ability in a functional ELISA. Immobilized human IL2Rb at 10 µg/ml (100 µl/well) can bind biotinylated human IL2, The EC50 of biotinylated human IL2 is 0.1-0.24 µg/mL. 2. Measured by its ability to inhibit IL15-dependent proliferation of MO7e human megakaryocytic leukemic cells in the presence of 4.0 ng/mL of recombinant human IL5. The ED50 for this effect is 1-4µg/mL.

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

Endotoxin: < 1.0 EU per µg 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 100mM NaCl, 50mM Tris, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: CD122;IL15RB;P70-75

Immunogen Information:

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.