



Recombinant Protein Technical Manual

Recombinant Human IL2RG/CD132 Protein (His Tag)(Active)
RPES3800

Product Data:

Product SKU: RPES3800

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P31785

Protein Information:

Molecular Mass: 28.8 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by its ability to bind biotinylated recombinant rat IL2 in a functional ELISA.

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein 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 20mM Tris, 500mM NaCl, pH 7.4, 10% gly

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

Application: Functional ELISA

Synonyms: Cytokine receptor common subunit gamma; Interleukin-2 receptor subunit gamma; gammaC; P64; CD132; IL2RG; SCIDX;SCIDX1; CIDX

Immunogen Information:

Sequence: Met 1-Asn 254

Background:

The common gamma chain (γ_c) (or CD132), also known as interleukin-2 receptor subunit gamma or IL2RG, is a member of the type I cytokine receptor family expressed on most lymphocyte (white blood cell) populations, and its gene is found on the X-chromosome of mammals. The common gamma chain (γ_c) (or IL2RG), is a cytokine receptor sub-unit that is common to the receptor complexes for at least six different interleukin receptors: IL-2, IL-4, IL-7, IL-9, IL5 and interleukin-21 receptor. It is a component of multiple cytokine receptors that are essential for lymphocyte development and function. X-linked severe combined immunodeficiency (XSCID) is a rare and potentially fatal disease caused by mutations of IL2RG, the gene encoding IL2RG. IL2RG was demonstrated to be a component of the IL-4 receptor on the basis of chemical cross-linking data, the ability of IL2RG to augment IL-4 binding affinity. The observation that IL-2R gamma is a functional component of the IL-4 receptor, together with the finding that IL-2R gamma associates with the IL-7 receptor, begins to elucidate why deficiency of this common gamma chain (gamma c) has a profound effect on lymphoid function and development, as seen in X-linked severe combined immunodeficiency.