

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

Catalog No. PKSH031530

Note: Centrifuge before opening to ensure complete recovery of vial contents.

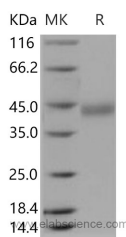
Description

Synonyms	Cytokine receptor common subunit gamma; Interleukin-2 receptor subunit gamma; gammaC; P64; CD132; IL2RG; SCIDX;SCIDX1; CIDX
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Asn 254
Accession	P31785
Calculated Molecular Weight	28.8 kDa
Tag	C-His
Bioactivity	Measured by its ability to bind biotinylated recombinant rat IL2 in a functional ELISA.

Properties

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

Data



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, IL-15 and interleukin-21 receptor. It is a component of multiple cytokine receptors that are essential for lymphocyte development

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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.