

Recombinant Mouse IL2RG/CD132 Protein (His & Fc Tag)

Catalog No. PKSM040876

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

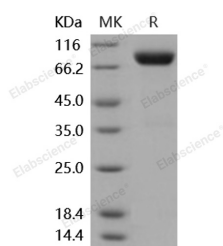
Description

Synonyms	CD132;gamma(c);gc
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Ala 263
Accession	NP_038591.1
Calculated Molecular Weight	56.3 kDa
Observed molecular weight	75-85 kDa
Tag	C-His-Fc
Bioactivity	Measured by its ability to bind biotinylated recombinant rat IL2 in a functional ELISA.

Properties

Purity	> 92 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 92 % as determined by reducing SDS-PAGE.

Background

The common gamma chain (γc) (or CD132), also known as interleukin-2 receptor subunit gamma or IL2RG, is a member

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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 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.