Recombinant Human IL2RG/CD132 Protein (aa 1-254, Fc Tag)

Catalog Number: PKSH031531

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

Description	
Species	Human
Source	HEK293 Cells-derived Human IL2RG/CD132 protein Met 1-Asn254, with an C-terminal
	hFc
Calculated MW	54.4 kDa
Observed MW	71 kDa
Accession	P31785
Bio-activity	Not validated for activity
Properties	
Purity	> 99 % 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 $< -20^{\circ}$ 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% Tween 80 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	
	KDa M
	116
	66.2
	45.0
	35.0

> 99 % as determined by reducing SDS-PAGE.

25.0

18.4 14.4

Background

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The common gamma chain (γc) (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 (γc) (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.