

## Recombinant Rat IL2RG/CD132 Protein (His Tag)

**Catalog Number:** PKSR030324

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

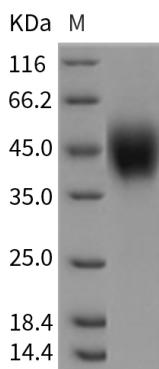
### Description

<b>Species</b>	Rat
<b>Source</b>	HEK293 Cells-derived Rat IL2RG/CD132 protein Met1-Ala262, with an C-terminal His
<b>Calculated MW</b>	29.5 kDa
<b>Observed MW</b>	41-50 kDa
<b>Accession</b>	Q68FU6
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 99 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 99 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

The common gamma chain ( $\gamma$ 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 ( $\gamma$ 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.