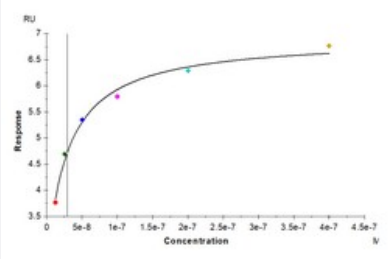
Bioactive CellTx™ HuPro®

IL2RG (Human) Recombinant Protein

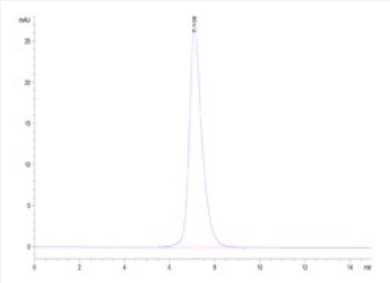
Catalog # P9743 Size 100 ug

Applications



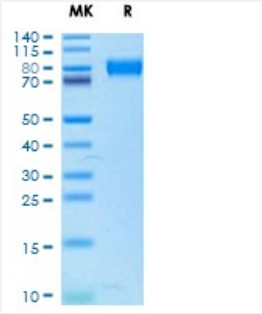
Surface Plasmon Resonance

Human IL-2 R gamma, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-2, No Tag with an affinity constant of 28.93 nM as determined in SPR assay (Biacore T200).



SEC-HPLC

The purity of Human IL-2 R gamma is greater than 95% as determined by SEC-HPLC.



Tris-Bis PAGE

Human IL-2 R gamma on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Specification

Product Description	Human IL2RG (P31785-1, 27 a.a. - 239 a.a.) partial recombinant protein with hFc tag at C-terminus expressed in HEK293 cells.

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Sequence	LNTTILTPNGNEDTTADFFLTTMPTDSLSVSTLPLPEVQCFVFNVEYMNCTWNSSSEPQPTNLTLH YWYKNSDNDKVQKCSHYLFSEEITSGCQLQKKEIHLYQTFVVQLQDPREPRRQATQMLKLQNLVI PWAPENLTLHKLSESQLELNWNNRFLNHCLEHLVQYRTDWDHSWTEQSVDYRHKFSLPSVDGQ KRYTFRVRSRFNPLCGSAQHWSEWSHPIHWGSNTSKEN
Host	Human
Theoretical MW (kDa)	54.14
Form	Lyophilized
Preparation Method	Mammalian cell (Expi293, high-yield transient HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	The affinity constant of 28.93 nM as determined in SPR assay (Biacore T200).
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human IL-2 R gamma is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human IL-2 R gamma on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from sterile distilled Water is > 100 ug/mL
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of bioactivity analysis

Applications

- Functional Study
- SDS-PAGE
- Surface Plasmon Resonance

  Human IL-2 R gamma, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-2, No Tag with an affinity constant of 28.93 nM as determined in SPR assay (Biacore T200).

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Gene Info — IL2RG

Entrez GeneID	3561
Protein Accession#	P31785-1
Gene Name	IL2RG
Gene Alias	CD132, IMD4, SCIDX, SCIDX1
Gene Description	interleukin 2 receptor, gamma (severe combined immunodeficiency)
Omim ID	300400 308380 312863
Gene Ontology	Hyperlink
Gene Summary	The interleukin 2 (IL2) receptor gamma chain (IL2RG), an important signalling component of many interleukin receptors (IL2,IL4,IL7,IL9, and IL15), is thus referred to as the common gamma chain. Mutations in this X-chromosome-linked gene cause X-linked severe combined immunodeficiency (XSCID). [provided by RefSeq
Other Designations	common cytokine receptor gamma chain|interleukin 2 receptor gamma chain|interleukin 2 receptor, gamma

Pathway

- Cytokine-cytokine receptor interaction
- Endocytosis
- Jak-STAT signaling pathway
- Primary immunodeficiency

Disease

- Asthma
- Bronchiolitis
- Genetic Predisposition to Disease
- Immunologic Deficiency Syndromes

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- Infant
- Lymphopenia
- Respiratory Syncytial Virus Infections
- Severe combined immunodeficiency

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