

Active Recombinant Rat Interleukin 2 Receptor, Alpha

Cat. No. IL2ra-474R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant RatIL2ra protein was expressed in Chinese Hamster Ovary cell line, CHO-derived. Glu22- Gln235.
Species	Rat
Source	CHO
ProteinLength	22-235 a.a.
Description	IL2ra, also known asCD25, is a 55 kDa type I membrane glycoprotein that belongs to the family ofcytokine receptors that utilize the common gamma chain subunit (yc). IL2ra isprimarily expressed on activated T cells and on regulatory T cells (Treg). Therat IL2ra cDNA encodes a 267 amino acid (aa) precursor that includes a 21 aasignal peptide, a 214 aa extracellular domain (ECD) with two Sushi domains, a21 aa transmembrane segment, and an 11 aa cytoplasmic domain. Within the ECD, rat IL2ra shares 58% and 81% aa sequence identity with human and mouse IL2 R α , respectively. It shares approximately 15% aa sequence identity with IL4, 7, 9,15, and 21 receptor subunits that also complex with yc.
Form	Lyophilized from a0.2 μ m filtered solution in PBS.
N-terminalSequence	Glu22
MolecularWeight	51.6 kDa (monomer)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Activity	Measured by its ability to inhibit the IL2 dependent proliferation of MO7e human megakaryocytic leukemia cells. Avanzi, G. et al. (1988) Br. J. Haematol. 69:359. The ED50 for this effect is typically 0.35-1.4 µg/mL in the presence of 30 ng/mL of rhIL2.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Reconstitution	Reconstitute at 500 µg/mL in sterile PBS.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.

GENE INFORMATION

Gene Name	IL2ra interleukin 2 receptor, alpha [<i>Rattus norvegicus</i>]
Official Symbol	IL2ra
Synonyms	IL2ra; interleukin 2 receptor, alpha; IL2RAC; interleukin-2 receptor subunit alpha; IL2-RA; IL-2-RA; IL-2R subunit alpha; IL-2 receptor alpha subunit; IL-2 receptor subunit alpha; interleukin-2 receptor alpha chain; interleukin 2 receptor, alpha chain
Gene ID	25704
mRNA Refseq	NM_013163
Protein Refseq	NP_037295
Chromosome	17q12.3

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Location	
Pathway	Cytokine Signalingin Immune system; Cytokine-cytokine receptor interaction; Endocytosis; HTLV-infection; Hematopoietic cell lineage; IL-2 Signaling Pathway; Immune System;Inflammatory Response Pathway; Interleukin receptor SHC signaling;Interleukin-2 signaling; Interleukin-3, 5 and GM-CSF signaling; Jak-STATsignaling pathway; Measles; Signaling by Interleukins
Function	drug binding;interleukin-2 binding; interleukin-2 receptor activity; receptor activity
PDB rendering based on 1z92.	