

# Human CD25 (IL-2R alpha) Recombinant Protein, eBioscience™

## Product Details

Size	100 µg
Species	Human
Expression system	Insect cells
Amino acid sequence	Human CD25, amino acids Glu22-Gln240 (Accession # NP_000408.1)
Molecular weight	24.8 kDa
Class	Recombinant
Type	Protein
Purity	>98% by SDS-PAGE and HPLC
Endotoxin concentration	<0.1 ng/µg
Activity	ED50 = 0.5-1.5 µg; determined by the dose-dependent proliferation of CTLL-2 cells stimulated with 1 ng/mL IL-2.
Conjugate	Unconjugated
Form	Lyophilized
Storage conditions	-20°C

Applications	Tested Dilution	Publications
Functional Assay (FN)	Assay-Dependent	-
Control (Ctrl)	Assay-Dependent	-

## Product Specific Information

**Description:** The human soluble IL-2 receptor alpha chain (sIL-2Ra) is generated by proteolytic cleavage of the cell-surface bound receptor on activated T cells. The IL-2Ra (also known as CD25) is expressed by early progenitors of the T and B lineage, as well as by activated mature T and B lymphocytes. By itself, CD25 binds IL-2 with low affinity. However, association with CD122 (IL-2 receptor beta chain) and CD132 (common gamma chain) results in formation of the high affinity IL-2R. CD25 plays a role in lymphocyte differentiation and activation/proliferation. sIL-2Ra has been detected in the serum of patients with autoimmune disease and leukemia. Reports have demonstrated that addition of sIL-2Ra can inhibit IL-2-mediated signaling and enhance Th17 responses.

**Applications Reported:** Recombinant human soluble IL-2Ra is biologically active and can enhance proliferation of mouse CTLL-2 cells stimulated with 1 ng/mL IL-2.

**Applications Tested:** The ED50 of this protein, as determined by increased proliferation of mouse CTLL-2 cells stimulated with 1 ng/mL IL-2, is 0.5-1.5 µg/mL.

**Source:** Insect cells (amino acids Glu22-Gln240; accession #: NP\_000408.1).

**Bioactivity:** The ED50 of this protein, as determined by increased proliferation of mouse CTLL-2 cells stimulated with 1 ng/mL IL-2, is 0.5-1.5 µg/mL.

**Endotoxin:** Less than 0.1 ng/ug cytokine as determined by the LAL assay. **Purity:** >98% as determined by SDS-PAGE and HPLC.

**Molecular Weight:** 24.8 kDa.

**Storage and handling:** For best recovery, quick spin vial prior to opening. Reconstitute in 1X PBS, pH 7.2 to a concentration of 0.1-1.0 mg/mL. Do not vortex. Use in sterile environment. Store lyophilized protein at less than or equal to -20°C. Reconstituted protein solution can be stored with carrier-protein (e.g., 0.1% BSA) at less than or equal to -20°C.

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