

## HUMAN IL2 PROTEIN, HFC TAG

**Cat.#:** 11256

**Product Name:** Human IL2 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** IL-2;lymphokine;TCGF

**Target:** IL2

**UNIPROT ID:** P60568

**Description:** Recombinant Human IL2 Protein with C-terminal human Fc tag

**Background:** This gene is a member of the interleukin 2 (IL2) cytokine subfamily which includes IL4, IL7, IL9, IL15, IL21, erythropoietin, and thrombopoietin. The protein encoded by this gene is a secreted cytokine produced by activated CD4 and CD8 T lymphocytes, that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine (IL2R) is a heterotrimeric protein complex whose gamma chain is also shared by IL4 and IL7. The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli. [provided by RefSeq, Sep 2020]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 41.6 kDa after removal of the signal peptide.

**Molecular Characterization:** IL2(Ala21-Thr153) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

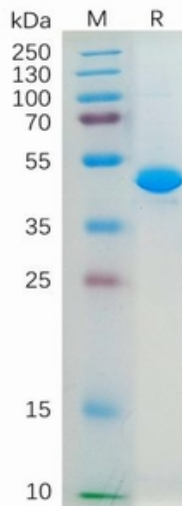


Figure 1. Human IL2 Protein, hFc Tag on SDS-PAGE under reducing condition.

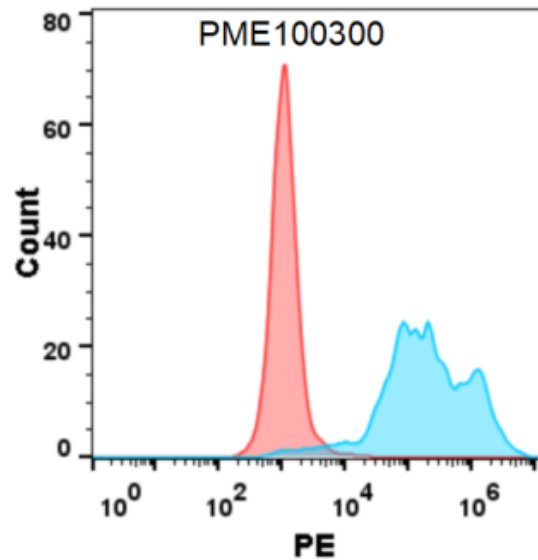


Figure 2. Flow cytometry analysis with 1  $\mu\text{g/ml}$  Human IL2 Protein, hFc tag (11256) on Expi293 cells transfected with human IL2RB (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

### Human IL2, hFc tagged protein ELISA

0.2  $\mu\text{g}$  of Human IL2RA, His tagged protein per well

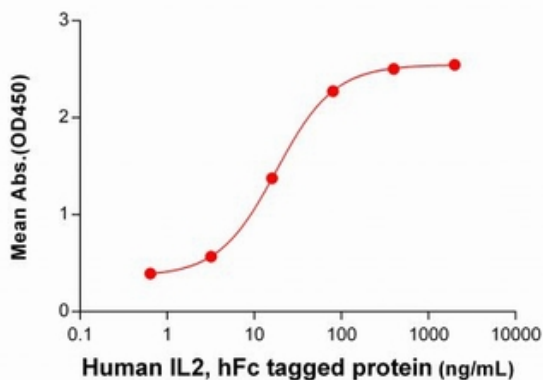


Figure 3. ELISA plate pre-coated by 2  $\mu\text{g/ml}$  (100  $\mu\text{l/well}$ ) Human IL2RA Protein, His Tag 11217 can bind Human IL2 Protein, hFc Tag (11256) in a linear range of 0.64-400 ng/mL.