

## HUMAN IL-15 PROTEIN

**Cat.#:** 12025

**Product Name:** Human IL-15 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** Interleukin-15;IL-15;IL15

**Target:** IL-15

**UNIPROT ID:** P40933

**Description:** Recombinant Human Interleukin-15 is produced by our E.coli expression system and the target gene encoding Asn49-Ser162 is expressed.

**Background:** Human Interleukin 15 (IL-15) is a cytokine that regulates T cell and natural killer cell activation and proliferation. IL-15 binds to the alpha subunit of the IL15 receptor (IL-15RA) with high affinity. IL-15 also binds to the beta and gamma chains of the IL-2 receptor, but not the alpha subunit of the IL2 receptor. IL-15 is structurally and functionally related to IL-2. Both cytokines share some subunits of receptors, allowing them to compete for and negatively regulate each other's activity. The number of CD8 memory T cells is controlled by a balance between IL-15 and IL-2. Despite their many overlapping functional properties, IL-2 and IL-15 are, in fact, quite distinct players in the immune system. IL-15 is constitutively expressed by a wide variety of cell types and tissues, including monocytes, macrophages and DCs. Mature Human IL-15 shares 70% amino acid sequence identity with Mouse and Rat IL-15.

**Species/Host:** E.coli

**Molecular Weight:** 12.5 KDa

**Molecular Characterization:** Not available

**Purity:** Greater than 95% as determined by reducing SDS-PAGE.

**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.

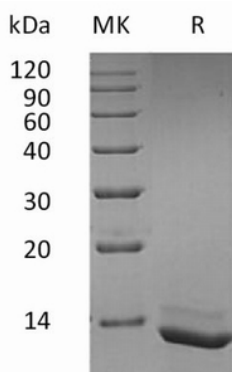


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.

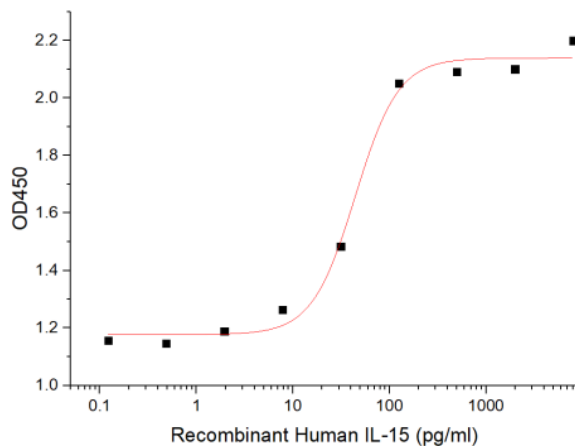


Figure 2. Measured in a cell proliferation assay using CTLL-2 mouse cytotoxic T cells. The ED50 for this effect is 40-200pg/ml.