

**HUMAN IL-15RAANDIL-15 (C-FC) PROTEIN****Cat.#:** 12092**Product Name:** Human IL-15RAandIL-15 (C-Fc) Protein**Size :** 10 µg; 50 µg and 100 µg**Synonyms:** IL15RAandIL15;Interleukin-15;IL-15;IL15;IL-15 receptor subunit alpha;IL-15RA;IL-15R-alpha;interleukin-15 receptor subunit alpha**Target:** IL-15RAandamp;IL-15**UNIPROT ID:** Q13261;P40933**Description:** Recombinant Human Interleukin-15 Receptor Alpha And Interleukin-15 Fusion Protein Is Produced By Our Mammalian Expression System And The Target Gene Encoding Ile31-Asp96AndAsn49-Ser162(Asn120Asp) Is Expressed With A Fc Tag At The C-Terminus.**Background:** IL15RA is a high-affinity receptor for interleukin-15. IL15ra associates as a heterotrimer with the IL-2 receptor beta and gamma subunits to initiate signal transduction. It can signal both in cis and trans where IL15R from one subset of cells presents IL15 to neighboring IL2RG-expressing cells. IL15ra is expressed in special cells including a wide variety of T and B cells and non-lymphoid cells. 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 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.**Species/Host:** HEK293**Molecular Weight:** 46.9 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-HC, 150 mM NaC, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

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



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