

## 32-8662: Recombinant Human IL-15 Receptor $\alpha$ & IL-15 Fusion Protein/IL15RA&IL15 (C-Fc)

**Gene :** IL15RA  
**Gene ID :** 3601  
**Uniprot ID :** Q13261

### Description

Source: Human Cells.  
MW :46.9kD.

Recombinant Human IL-15 Ra & IL-15 fusion protein is produced by our Mammalian expression system and the target gene encoding Ile31-Asp96&Asn49-Ser162 is expressed with a Fc tag at the C-terminus. Interleukin-15 receptor subunit alpha, also known as IL15ra, is a high-affinity receptor for interleukin-15. IL15ra associates as a heterotrimer with the IL-2 receptor beta and gamma subunits (Common gamma chain, or gamma c) 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. Human IL15ra shares 45% amino acid sequence homology with the mouse form of the receptor. Eight isoforms of IL-15 R alpha mRNA have been identified, resulting from alternative splicing events involving different exons. 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.

### Product Info

**Amount :** 10  $\mu$ g / 50  $\mu$ g  
**Content :** Lyophilized from a 0.2  $\mu$ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** ITCPPPMSEVHADIWVKSYSLYSRERYICNSGFKRKAGTSSLTECVLNKATNVAHWTPSLKCIRDVDDKTHTCP  
PCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYR  
VVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPS  
DIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK  
GGGGSGGGSGGGGSNWNVISDLKKIEDLIQSMHIDATLYTESDVHPSCVKVTAMKCFLLQLVISLES GDASI  
HDTVENLIILANDSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFINTS

### Application Note

**Endotoxin :** Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g) as determined by LAL test.

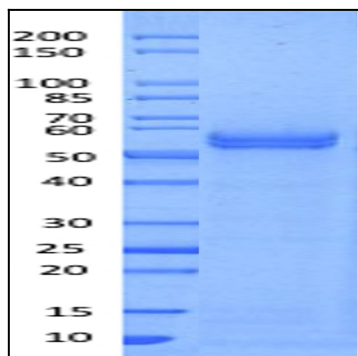


Figure 1: Coomassie Blue. IL15RA (~2ug) loaded in 4-20% SDS gel under reducing conditions.