

32-18081: Recombinant Human IL-15RA&IL-15 Complex (C-Fc) Protein (Discontinued)

Uniprot ID : P29459;P29460

Alternative Name : IL-15 Receptor alpha & IL-15 Fusion Protein; IL15RA&IL15; IL15RA&IL15 Complex; Interleukin-15; IL-15; IL15

Description

Molecular Weight: 34.4&12.8 KDa

Description: Recombinant Human Interleukin-15 Receptor Alpha & Interleukin-15 Fusion Protein Complex is produced by our Mammalian expression system and the target gene encoding Ile31-Asp96&Asn49-Ser162 (Asn120Asp) is expressed with a Fc tag at the C-terminus.

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. The enhanced activity of the IL-15N72D:IL-15R?Su/Fc complex is likely the result of the increased binding activity of IL-15N72D to IL-15R?? c , optimized cytokine trans-presentation by the IL-15R?Su domain, the dimeric nature of the cytokine domain and its increased in vivo half-life compared to IL-15. These findings indicate that this IL-15 superagonist complex could serve as a superior immunostimulatory therapeutic agent.

Product Info

Amount : 50 µg

Content : Lyophilized from a 0.2 µm filtered solution of PBS, 5% Trehalose, pH 7.4.

Storage condition : 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.