



Recombinant Protein Technical Manual

**Recombinant Human IL15RA&IL15 Fusion Protein
(Fc Tag)(Active)**
RPES1113

Product Data:

Product SKU: RPES1113

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q13261&P40933

Protein Information:

Molecular Mass: 46.9 kDa

AP Molecular Mass: 50-60 kDa

Tag: C-Fc

Bio-activity: Measured in a cell proliferation assay using CTLL-2 mouse cytotoxic T cells. The ED50 for this effect is 5-20 ng/ml.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Cell Culture

Synonyms: IL15RA&IL15; Interleukin5; IL5; IL15; IL5 receptor subunit alpha; IL5RA; IL5R-alpha; interleukin5 receptor subunit alpha

Immunogen Information:

Sequence: Ile31-Asp96&Asn49-Ser162

Background:

IL15RA is a high-affinity receptor for interleukin5. 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 Tand B cells and non-lymphoid cells. IL5 is a cytokine that regulates T cell and natural killer cell activation and proliferation. IL5 binds to the alpha subunit of the IL5RA with high affinity. IL5 also binds to the beta and gamma chains of the IL-2 receptor, but not the alpha subunit of the IL2 receptor. IL5 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 IL5 and IL-2. Despite their many overlapping functional properties, IL-2 and IL5 are, in fact, quite distinct players in the immune system. IL5 is constitutively expressed by a wide variety of cell types and tissues, including monocytes, macrophages and DCs.