



Recombinant Protein Technical Manual

**Recombinant Human Interleukin5/IL5 Protein
(Active)**
RPES1731

Product Data:

Product SKU: RPES1731

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P40933

Protein Information:

Molecular Mass: 12.5 kDa

AP Molecular Mass: 12 kDa

Tag:

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

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

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

Storage: 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.

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 7.0.

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

Application: Cell Culture

Synonyms: IL5;Interleukin 15;IL15

Immunogen Information:

Sequence: Asn49-Ser162

Background:

Human Interleukin 15 (IL5) is a cytokine that regulates T cell and natural killer cell activation and proliferation. IL5 binds to the alpha subunit of the IL15 receptor (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. Mature Human IL5 shares 70% amino acid sequence identity with Mouse and Rat IL5.