

Active Recombinant Human IL15

Cat. No. IL15-25H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human Interleukin-15/IL-15 produced in E. coli is a single non-glycosylated polypeptide chain containing 114 amino acids with a molecular mass of 12.5 kD.
Species	Human
Source	E.coli
Description	Human 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. Mature Human IL-15 shares 70% amino acid sequence identity with Mouse and Rat IL-15.
Form	Lyophilized from a 0.2 µM filtered solution of 20mM PB, 150mM NaCl, pH 7.0.
Bio-activity	ED50 is less than 0.5 ng/ml as determined by the dose dependent stimulation of mouse CTLL-2 cell proliferation. Specific Activity of 2.0×10^6 IU/mg.

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Endotoxin	Less than 0.1 EU/μg.
Purity	Greater than 95% as determined by RP-HPLC and reducing SDS-PAGE.
Storage	Lyophilized protein should be stored at< -20°C, though stable at room temperature for 3 years. 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 years.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/ml. Dissolve the lyophilized protein in 1X PBS. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

GENE INFORMATION

Gene Name	IL15 interleukin 15 [Homo sapiens]
Official Symbol	IL15
Synonyms	IL15; interleukin 15; interleukin-15; IL 15; MGC9721; IL-15;
Gene ID	3600
mRNA Refseq	NM_000585
Protein Refseq	NP_000576
MIM	600554
UniProt ID	P40933

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Chromosome Location	4q31
Pathway	Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Cytokines and Inflammatory Response, organism-specific biosystem; HTLV-I infection, organism-specific biosystem; HTLV-I infection, conserved biosystem; Herpes simplex infection, organism-specific biosystem; Herpes simplex infection, conserved biosystem;
Function	cytokine activity; cytokine receptor binding; protein binding;

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