

RECOMBINANT HUMAN INTERLEUKIN-15 (hIL-15)

Catalog # 02515

5 mg per vial

Catalog # 02648

25 mg per vial

PRODUCT DESCRIPTION:

Human Interleukin 15 (IL-15) is produced primarily by epithelial cells, fibroblasts and monocytes, but its mRNA is found in a wide variety of human cell types including peripheral blood mononuclear cells, placenta, skeletal muscle, kidney, lung, liver, heart and bone marrow stromal cells. IL-15 shares many biological properties with IL-2 including T, B, and NK cell stimulatory activities. In contrast, they have opposing activities on specific subpopulations, IL-15 promotes division of CD8 memory T cells whereas IL-2 inhibits such division. Human IL-15 cDNA encodes a 162 amino acid residue precursor protein containing a 48 amino acid residue signal peptide that is cleaved to yield the 114 amino acid residue mature protein. IL-15 binds to a heterotrimeric receptor formed by IL-15R α and the IL-2R β and γ chains. Human IL-15 is active in mouse cells.

SOURCE:

A DNA sequence encoding the 114 amino acid residue mature human IL-15 was expressed in *E. coli*.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level less than 0.1 ng per 1 μ g of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a 0.2 μ m filtered solution in 50% acetonitrile plus 0.1% TFA containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

RECONSTITUTION:

It is recommended that sterile phosphate-buffered saline containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 5 μ g/mL of the cytokine.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted hIL-15 can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined in a cell proliferation assay using an IL-15 responsive human megakaryocytic leukemic cell line, MO7e and the ED₅₀ for this effect was typically 0.5 - 2.0 ng/mL.

**THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.**