

Product Information

Interleukin-15, human recombinant, expressed in *E. coli*

Catalog Number **I8648**
Storage Temperature $-20\text{ }^{\circ}\text{C}$

Product Description

Interleukin-15 (IL-15), a 12.5 kDa human, recombinant protein purified from *E. coli*, was initially isolated from the simian kidney epithelial cell line CV1/EBNA.¹ Recombinant human IL-15 is produced from a DNA sequence encoding the 162 amino acid precursor protein with a 48 amino acid signal peptide that is cleaved to yield a 114 amino acid mature protein.¹

IL-15 mRNA is found in many cell types including peripheral blood mononuclear cells, placenta, and skeletal muscle.² It is produced by epithelial cells and monocytes. Human IL-15 shares sequence identity with simian (~97%) and murine (~73%). IL-15 competes for binding sites with IL-2, as both IL-2 and IL-15 stimulate the growth of cells through the IL-2 receptor. IL-15 shares many of the same biological properties of IL-2, including stimulation of mouse CTLL-2 cells.²

This product is supplied a lyophilized powder from a 0.2 μm filtered solution of phosphate buffered saline, pH 7.4, containing 50 μg bovine serum albumin per 1 μg as a carrier protein.

The specific activity of Recombinant Human IL-15 is $\sim 4.5 \times 10^5$ U/ μg , which is calibrated against recombinant human IL-15 WHO International Standard (NIBSC code: 95/554). It is measured in a cell proliferation assay using MO7e human megakaryocytic leukemic cells.

Purity: >97% (SDS-PAGE, silver stain)

Endotoxin: <1.0 EU (endotoxin units) per 1 μg of the cytokine (LAL method)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the product using 0.2 μm filtered phosphate buffer saline containing at least 0.1% human serum albumin or bovine serum albumin to a concentration of not less than 5 $\mu\text{g}/\text{mL}$.

Storage/Stability

Prior to reconstitution, store at $-20\text{ }^{\circ}\text{C}$ or below.

Reconstituted product should be frozen in working aliquots at $-20\text{ }^{\circ}\text{C}$ or below. Avoid repeated freezing and thawing. Do not store in a "frost-free" freezer.

References

1. Grabstein, K., et al., Science, **264**, 965 (1994).
2. Callard, R, et al., The Cytokine Facts Book, Academic Press, London, 97 (1994).

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