



# Recombinant Human IL-15

20190301BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-053</b>
Size:	10 µg
Lot. No.:	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	3600
<b>Synonyms:</b>	IL15; IL-15

IL-15 is an immunomodulating cytokine that stimulates the proliferation of T lymphocytes and shares many biological properties with IL-2. IL-15 exerts its biological activities primarily on T cells. It is also essential in the development, survival and activation of NK cells. Increased expression of IL-15 has been implicated with rheumatoid arthritis, inflammatory bowel disease and diseases affiliated with retroviruses HIV and HTLV-I. Human IL-15 is biologically active on mouse cells as measured by the dose-dependent stimulation of the proliferation of mouse CTLL cells. Recombinant human IL-15 is a 12.9 kDa protein consisting of 115 amino acid residues.

### Sequence

MNWNVISDL KKIEDLIQSM HIDATLYTES DVHPSCKVTA  
MKCFLLLELQV ISLES GDASI HDTVENLIIL ANNSLSSNGN  
VTESGCKECE ELEEKNIKEF LQSFVHVIVQM FINTS

### Database References

<b>Protein RefSeq:</b>	NP_000576.1
<b>Uniprot ID:</b>	P40933
<b>mRNA RefSeq:</b>	NM_000585.4

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng/µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	114
<b>MW:</b>	12.9 kDa

**Stability:** The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 9 months at -20°C to -80°C.

**Reconstitution:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** The ED<sub>50</sub> as determined by the dose-dependent stimulation of the proliferation of CTLL-2 cells was found to be ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10<sup>6</sup> units/mg.