



## Product Datasheet

<b>Product Name</b>	Interleukin-15 Human Recombinant
<b>Cata No</b>	CB500132
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	IL-15, MGC9721.

### Description

The protein encoded by this gene is a cytokine that regulates T and natural killer cell activation and proliferation. This cytokine and interleukine 2 share many biological activities. They are found to bind common hematopoietin receptor subunits, and may compete for the same receptor, and thus negatively regulate each other's activity. The number of CD8+ memory cells is shown to be controlled by a balance between this cytokine and IL2. This cytokine induces the activation of JAK kinases, as well as the phosphorylation and activation of transcription activators STAT3, STAT5, and STAT6. Studies of the mouse counterpart suggested that this cytokine may increase the expression of apoptosis inhibitor BCL2L1/BCL-x(L), possibly through the transcription activation activity of STAT6, and thus prevent apoptosis. Two alternatively spliced transcript variants of this gene encoding the same protein have been reported.

Interleukin-15 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 114 amino acids and having a molecular mass of 12774 Dalton. The IL-15 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized powder.

### Biological Activity

The ED50 as determined by the dose-dependant

stimulation of the proliferation of mouse CTLL-2 was found to be < 0.5 ng/ml, corresponding to a Specific Activity of  $2 \times 10^6$  IU/mg.

### Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis SDS-PAGE.

### Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution with 5mM Tris pH 8.0.

### Reconstituion

It is recommended to reconstitute the lyophilized Interleukin-15 in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized Interleukin-15 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL15 should be stored at 4°C between 2-7 days and for future use below -18°C.

### Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Asn-Trp-Val-Asn-Val.

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