

### **Datasheet**

# Interleukin 15

## **Human Recombinant**

Product	Description	Catalogue-No.	Size
IL-15	IL-15 human recombinant	CB-2131500 CB-2131501	2 μg 10 μg

# **Product description**

Synonyms: IL-15, MGC9721

The protein encoded by this gene is a cytokine that regulates T and natural killer cell activation and proliferation. IL-15 and IL-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 IL-2. IL-15 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.

IL-15 human rec. produced in E.Coli is a single, non-glycosylated polypeptide chain containing 114 amino acids (and an N-terminal Methionine) and having a molecular mass of 12.8kDa. The IL-15 is purified by proprietary chromatographic techniques.

## Solubility and storage conditions

It is recommended to reconstitute the lyophilized IL-15 in sterile  $18M\Omega$ -cm H2O not less than  $100\mu g/ml$ , which can then be further diluted to other aqueous solutions.

Lyophilized IL-15 although stable at room temperature for 3 weeks, should be stored desiccated below -20°C. Upon reconstitution IL-15 should be stored at 2-8°C between 2-7 days and for future use below -20°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

#### Composition

Lyophilized from PBS, pH 7.4

Purity: > 97.0% as determined by SDS-PAGE and RP-HPLC

Amino acid sequence: MNWVNVISDL KKIEDLIQSM HIDATLYTES DVHPSCKVTA MKCFLLELQV ISLESGDASI HDTVENLIIL ANNSLSSNGN VTESGCKECE ELEEKNIKEF LQSFVHIVQM FINTS Biological activity: The ED $_{50}$  as determined by the dose-dependent stimulation of the proliferation of mouse CTLL-2 was found to be < 0.5ng/ml, corresponding to a Specific Activity of 2 x  $10^6$  U per mg.

## **Technical support**

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

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