

# Interleukin-15, His Tag, human recombinant (rHulL-15-His)

Catalog No: 95022 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** IL-15, MGC9721

#### **Background**

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.

## Description

Interleukin-15 His human recombinant produced in *E. coli* is single, a non-glycosylated, polypeptide chain containing 123 amino acids (49-162) having a total molecular weight of 13.9 kDa with a C-terminal hexahistidine tag. IL-15 His is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile filtered clear solution.

#### **Formulation**

IL-15 His is supplied in 20 mM Tris-HCl buffer (pH 8.0) 0.2 mM PMSF and 10% glycerol.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

#### **Purity**

Greater than 95.0% as determined by SDS-PAGE.

## **Amino Acid Sequence**

MNWVNVISDL KKIEDLIQSM HIDATLYTES DVHPSCKVTA MKCFLLELQV ISLESGDASI HDTVENLIIL ANNSLSSNGN VTESGCKECE ELEEKNIKEF LQSFVHIVQM FINTSLEHHH HHH

# Activity

Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED50 for this effect is <2.5 ng/ml, corresponding to a specific activity of 400,000 units/mg.

#### Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.