

Interleukin-15, His Tag, mouse recombinant (rmlL-15-His)

Catalog No: 97249
Lot No: XXXXX
Source: E. coli

Synonyms: IL-15, MGC9721, Interleukin-15, Il15, Al503618

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 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 152 amino acids (49-162) and having a molecular mass of 17.6 kDa. IL-15 is fused to a 37 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Formulation

The mouse IL-15 protein solution contains PBS, pH 7.4 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. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

Amino Acid Sequence

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMNW IDVRYDLEKI ESLIQSIHID TTLYTDSDFH PSCKVTAMNC FLLELQVILH EYSNMTLNET VRNVLYLANS TLSSNKNVAE SGCKECEELE EKTFTEFLQS FIRIVQMFIN TS

Activity

Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED50 for this effect is <1 ng/ml, corresponding to a specific activity of 1,000,000 IU/mg.

Usage

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