

Active Recombinant Mouse Interleukin 15, His-tagged

Cat. No. IL15-423M Lot. No. (See product label)

SPECIFICATION

Product Overview	Interleukin-15 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 152 amino acids (49-162 a.a.) and having a molecular mass of 17.6 kDa. The IL-15 is fused to a 37 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques.
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Species	Mouse
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Source	Mouse
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ProteinLength	49-162 a.a.
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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.
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Form	The mouse IL-15 protein solution contains PBS, pH-7.4 and 10% glycerol.
Purity	Greater than 90.0% as determined by SDS-PAGE.
Bio-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 1,000,000IU/mg.
Physical Appearance	Sterile filtered colorless solution.
Amino acid sequence	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMNW IDVRYDLEKI ESLIQSIHID TTLYTDSDFH PSCKVTAMNC FLLELQVILH EYSNMTLNET VRNVLYLANS TLSSNKNVAE SGCKECEEELE EKTFTFLQS FIRIVQMFIN TS.
Storage	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.
Pathways	Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway

GENE INFORMATION

Gene Name	Il15 interleukin 15 [Mus musculus]
Official Symbol	Il15
Synonyms	Il15; interleukin 15; AI503618
Gene ID	16168
mRNA Refseq	NM_008357

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Protein Refseq	NP_032383
UniProt ID	P48346
Chromosome Location	8 C2; 8 38.0 cM
Function	cytokine activity; cytokine receptor binding
PDB rendering based on 2Z3Q.	