

Active Recombinant Mouse Interleukin 15, His-tagged

Cat. No. II15-423M 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.

Species Mouse

Source Mouse

ProteinLength 49-162 a.a.

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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|----------------------------|--|
| 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 FLELQVILH EYSNMTLNET VRNVLYLANS TLSSKNVVAE SGCKECEEELE EKTFTEFLQS 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 [<i>Mus musculus</i>] |
| Official Symbol | Il15 |
| Synonyms | Il15; interleukin 15; AI503618 |
| Gene ID | 16168 |
| mRNA Refseq | NM_008357 |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



| | |
|----------------------------|--|
| Protein Refseq | NP_032383 |
| UniProt ID | P48346 |
| Chromosome Location | 8 C2; 8 38.0 cM |
| Function | cytokine activity; cytokine receptor binding |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA