

Bioactive

IL15 (Human) Recombinant Protein

Catalog # P7502

Size 10 ug

Applications

Result of bioactivity analysis

Result of bioactivity analysis

Specification

Product Description	Human IL 15 (P40933, 49 a.a. - 162 a.a.) partial recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	NWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLELQVISLESGDASIHDTVENLIL ANNSLSSNGNVTESGCKECEEELEEKNIKEFLQSFVHIVQMFINTS
Host	Escherichia coli
Theoretical MW (kDa)	12.8
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system
Purity	> 95% by SDS-PAGE
Endotoxin Level	< 0.2 EU per 1 ug of protein (determined by gel clotting method)
Activity	The ED ₅₀ was determined by the dose-dependent stimulation of the proliferation of CTLL-2 cells is < 5.0 ng/mL, corresponding to a specific activity of > 2.0 × 10 ⁶ units/mg.
Storage Buffer	Lyophilized from sterile distilled Water up to 100 ug/mL
Storage Instruction	Store at 4°C to 8°C for 1 week. For long term storage store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Result of bioactivity analysis
Result of bioactivity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — IL15

Entrez GeneID [3600](#)

Protein Accession# [P40933](#)

Gene Name IL15

Gene Alias IL-15, MGC9721

Gene Description interleukin 15

Omim ID [600554](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. [provided by RefSeq]

Other Designations OTTHUMP00000164617

Pathway

- [Cytokine-cytokine receptor interaction](#)
- [Jak-STAT signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Arthritis](#)
- [Asthma](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Connective Tissue Diseases](#)
- [Coronary Disease](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Fetal Diseases](#)
- [Fractures](#)
- [Genetic Predisposition to Disease](#)
- [Hematologic Diseases](#)
- [Hodgkin Disease](#)
- [Hypersensitivity](#)
- [Hypertrophy](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Kidney Failure](#)

- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Metabolic Syndrome X](#)
- [Multiple Myeloma](#)
- [Musculoskeletal Diseases](#)
- [Neoplasm](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Osteoporosis](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Psoriasis](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Respiratory Syncytial Virus Infections](#)
- [Skin Diseases](#)
- [Urinary Bladder Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)