

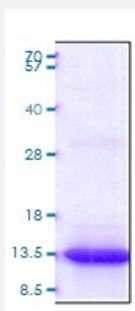
Bioactive

# IL15 (Human) Recombinant Protein

Catalog # P6963

Size 20 ug

## Applications



## Result of bioactivity analysis

Result of bioactivity analysis

IL15 (Human) Recombinant Protein stimulates cell proliferation of the CTLL2 mouse cytotoxic T cells. The ED50 range  $\leq 1$  ng/mL.

## Specification

|                      |                                                                                                                           |
|----------------------|---------------------------------------------------------------------------------------------------------------------------|
| Product Description  | Human IL15 (NP_751914, 49 a.a - 162 a.a.) partial recombinant protein with His tag expressed in <i>Escherichia coli</i> . |
| Host                 | Human                                                                                                                     |
| Theoretical MW (kDa) | 13.9                                                                                                                      |
| Form                 | Liquid                                                                                                                    |
| Preparation Method   | <i>Escherichia coli</i> expression system                                                                                 |
| Purity               | > 95% by SDS-PAGE                                                                                                         |
| Endotoxin Level      | > 1 EU per 1ug of protein (determined by LAL method)                                                                      |

|                         |                                                                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Activity                | Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED <sub>50</sub> range ≤ 1 ng/ml.                                                                                     |
| Quality Control Testing | 3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.                                                                                                                      |
| Recommend Usage         | SDS-PAGE<br>The optimal working dilution should be determined by the end user.                                                                                                                        |
| Storage Buffer          | In PBS, pH 7.4 (10% glycerol)                                                                                                                                                                         |
| Storage Instruction     | Stored at 2°C to 8°C for 1 week.<br>For long term storage, aliquot and store at -20°C to -80°C.<br>Avoid repeated freezing and thawing cycles.                                                        |
| Note                    | Result of bioactivity analysis<br>Result of bioactivity analysis<br>IL15 (Human) Recombinant Protein stimulates cell proliferation of the CTLL2 mouse cytotoxic T cells.<br>The ED50 range ≤ 1 ng/mL. |

## Applications

- SDS-PAGE

## Gene Info — IL15

|                    |                           |
|--------------------|---------------------------|
| Entrez GeneID      | <a href="#">3600</a>      |
| Protein Accession# | <a href="#">NP_751914</a> |
| Gene Name          | IL15                      |
| Gene Alias         | IL-15, MGC9721            |
| Gene Description   | interleukin 15            |
| Omim ID            | <a href="#">600554</a>    |
| Gene Ontology      | <a href="#">Hyperlink</a> |

**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](#)