

## Recombinant Human IL-11 (Interleukin-11)

---

### Product Description

IL-11 is a multifunctional cytokine produced by stromal cells, such as fibroblasts, epithelial cells and osteoclasts. It is expressed in a wide variety of tissues, including thymus, lung, bone, connective tissue and central nervous system. IL-11 plays an important regulatory role in hematopoiesis by stimulating growth of myeloid, erythroid and megakaryocyte progenitor cells. It also regulates bone metabolism, inhibits production of proinflammatory cytokines, and protects against gastromucosal injury. Recombinant Human IL-11 is a 19.3 kDa protein consisting of 179 amino acid residues.

### Typical Specifications

|                          |   |
|--------------------------|---|
| <b>Species</b>           | Human                                       |
| <b>Expression</b>        | E. coli Cell Expressed                      |
| <b>Activity</b>          | Typically $\leq 2.0$ ng/mL ED <sub>50</sub> |
| <b>Purity</b>            | >98%  |
| <b>Endotoxin</b>         | <1.0 EU/ $\mu$ g                            |
| <b>Molecular Mass</b>    | 19.3 kDa                                    |
| <b>Country of Origin</b> | USA   |

### Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

### Activity Assay

Determined by the dose-dependent stimulation of the proliferation of murine T11 cells.

### AA Sequence

|            |            |            |
|------------|------------|------------|
| MPGPPPGPPR | VSPDPRAELD | STVLLTRSLL |
| ADTRQLAAQL | RDKFPADGDH | NLDSLPTLAM |
| SAGALGALQL | PGVLTRLRAD | LLSYLRHVQW |
| LRRAGGSSLK | TLEPELGTQ  | ARLDRLRL   |
| QLLMSRLALP | QPPDPPAPP  | LAPPSSAWGG |
| IRAAHAILGG | LHLTDWAVR  | GLLLLKTRL  |

### Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

### Storage

This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

#### Limited Use and Restrictions

Unless otherwise stated in our catalog or other company documentation accompanying the product, products sold by HumanZyme, Inc. are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, including resale or use in manufacture, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals. For a complete statement of this Limited Use License and its application to drug discovery and diagnostic research, please visit [www.humanzyme.com](http://www.humanzyme.com).