

## Animal-Free IL-15 Protein, Pig (His)

Cat. No.:	HY-P700245AF
Synonyms:	Interleukin-15; IL-15; IL15
Species:	Pig
Source:	E. coli
Accession:	Q95253 (T49-S162)
Gene ID:	397683
Molecular Weight:	Approximately 14.1 kDa

### PROPERTIES

AA Sequence	<p>TWQHVISDLK    KIEDLIRSIH    MDATLYTESD    AHPNCKVTAM</p> <p>KCFLLRLRVI    LQESRNSDIS    DTVENLIILA    NSSLSSIEYK</p> <p>TESGCKECE    LEEKNINEFL    KSFIHIVQMF    INPS</p>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a solution containing 1X PBS, pH7.4.
Endotoxin Level	<0.01 EU per 1 µg of the protein by the LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	<p>The IL-15 Protein, a pivotal cytokine, assumes a major role in fostering inflammatory and protective immune responses against microbial invaders and parasites by modulating immune cells in both the innate and adaptive immune systems. It effectively stimulates the proliferation of natural killer cells, T-cells, and B-cells, concurrently promoting the secretion of diverse cytokines. In monocytes, IL-15 induces the production of IL8 and monocyte chemotactic protein 1/CCL2, chemokines that attract neutrophils and monocytes to infection sites. Notably, IL-15 differs from most cytokines as it is expressed in association with its high-affinity receptor IL15RA on the surface of IL15-producing cells. This unique expression pattern allows IL-15 to deliver signals to target cells expressing IL2RB and IL2RG receptor subunits. Upon binding to its receptor, IL-15 triggers the phosphorylation of JAK1 and JAK3, recruiting and subsequently phosphorylating signal transducer and activator of transcription-3/STAT3 and STAT5. Furthermore, in mast cells, IL-15 induces the rapid tyrosine phosphorylation of STAT6, exerting control over mast cell survival and the release of cytokines such as IL4.</p>
------------	---

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA