

# **Screening Libraries**

**Proteins** 



## **Product** Data Sheet

### IL-5 Protein, Mouse (HEK293, His-Avi)

Cat. No.: HY-P78314

Synonyms: Interleukin-5; IL-5; T-cell replacing factor; TRF; EDF

Species: HEK293 Source:

Accession: P04401 (M21-G133)

Gene ID: 16191

Molecular Weight: Approximately 16.03 kDa & 20-32 kDa

#### **PROPERTIES**

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of 20 mM Tris, 500 mM NaCl, 10% glycerol, pH 7.0.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

#### **DESCRIPTION**

#### Background

IL-5 Protein, a homodimeric cytokine predominantly expressed by T-lymphocytes and NK cells, plays a pivotal role in the regulation of eosinophils by influencing their survival, differentiation, and chemotaxis. Additionally, IL-5 acts on both activated and resting B-cells, stimulating immunoglobulin production, growth, and differentiation. Mechanistically, the biological effects of IL-5 are mediated through a receptor complex composed of the IL5RA subunit and the cytokine receptor common subunit beta/CSF2RB. Upon binding to the receptor, IL-5 triggers the activation of various kinases, including LYN, SYK, and JAK2, thus propagating signals through the RAS-MAPK and JAK-STAT5 pathways (By similarity). Structurally, IL-5 forms a homodimer that is disulfide-linked and interacts with its receptor components IL5RA and CSF2RB, highlighting the specificity and complexity of its molecular interactions in orchestrating immune responses.

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

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

Page 1 of 1