

## IL-5, Rat

**Cat. No.:** Z03093-50

**Size:** 50.0 ug

**Synonyms:** EDF, BCDLII, TRF

### Description:

Interleukin-5 (IL-5), produced by mast cells, T cells and eosinophils, is responsible for the activities attributed to eosinophil differentiating factor, B cell growth factor II and T cell-replacing factor (TRF). It can increase production and mobilization of eosinophils and CD34+ progenitors from the bone marrow. IL-5 plays an important role in inducing cell-mediated immunity against parasitic infections and certain tumors. IL-5 also promotes differentiation of basophils and primes them for histamine and leukotriene release.

Recombinant rat Interleukin-5 (rrIL-5) produced in *E. coli* is a disulfide-linked homodimer containing two non-glycosylated polypeptide chains of 113 amino acids each. A fully biologically active molecule, rrIL-5 has a molecular mass of 26.0 kDa analyzed by non-reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Amino Acid Sequence:

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00001 MEIPMSTVVK ETLIQLSTHR ALLTSNETMR LPVPTHKNHQ  
00041 LCIGEIFQGL DILKNQTVRG GTVEILFQNL SLIKKYIDGQ  
00081 KEKCGEERRK TRHFLDYLQE FLGVMSTEWA MEV
```

**Source:** *E. coli*

**Species:** Rat

**Biological Activity:** ED<sub>50</sub> < 0.4 ng/mL, measured by a cell proliferation assay using TF-1 Cells, corresponding to a specific activity of > 2.5 × 10<sup>6</sup> units/mg.

**Molecular Weight:** 26.0 kDa, observed by non-reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against 20mM Tris, pH8.5.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

**Purity:** > 95% by SDS-PAGE analysis.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant rat Interleukin-5 (rrIL-5) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rrIL-5 should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.