

IL-5, Rat

Cat. No.: Z03093-10

Size: 10.0 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
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Source: *E. coli*

Species: Rat

Biological Activity: ED₅₀ < 0.4 ng/mL, measured by a cell proliferation assay using TF-1 Cells, corresponding to a specific activity of > 2.5 × 10⁶ 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 ddH₂O 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.