

DATASHEET Version 20181206

IL-5, Rat

Cat. No.: Z03093-1 Size: 1.0 mg

Synonyms: EDF, BCDFII, 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:

00001 MEIPMSTVVK ETLIQLSTHR ALLTSNETMR LPVPTHKNHQ 00041 LCIGEIFQGL DILKNQTVRG GTVEILFQNL SLIKKYIDGQ 00081 KEKCGEERRK TRHFLDYLQE FLGVMSTEWA MEV Source: E. coli

Species: Rat

Biological Activity: $ED_{50} < 0.4$ ng/mL, measured by a cell proliferation assay using TF-1 Cells, corresponding to a specific activity of > 2.5×10^6 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_2O at 100 $\mu g/mL$.

Purity: > 95% by SDS-PAGE analysis.

Endotoxin Level: < 0.2 EU/ μ g, 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.

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