

Recombinant Rat IL5

Cat No:HR2R2287

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	IL5
Gene ID	24497
Accession	Q08125
Alternative Name	IL-5, B cell growth factor II, BCGF-II, Cytotoxic T lymphocyte inducer, Eosinophil differentiation factor T cell replacing factor, TRF Recombinant Rat Interleukin-5 (IL5)
Species	Rat
Source	E. coli
Description	<p>Interleukin-5 is a specific hematopoietic growth factor that is responsible for the growth and differentiation of eosinophils. IL-5 promotes the growth of immature hematopoietic progenitor cells BFU-E while it causes differentiation of CFU-E the proliferation of which is inhibited by IL-5. IL-5 strongly stimulates the proliferation, cell activation, and differentiation of eosinophils. B cells can be made responsive to IL-5 by treatment with suboptimal doses of IL-1. Interleukin-5 also promotes the generation of cytotoxic T cells from thymocytes. In thymocytes IL-5 induces the expression of high affinity IL-2 receptors. In contrast to human Interleukin-5, mouse IL-5 also acts on B cells. It induces the proliferation of pre-activated B cells and their differentiation. High affinity and low affinity receptors for IL-5 are expressed in all hematopoietic and lymphoid cells. The low affinity receptor, CD125, has a molecular mass of 50 kDa (p60). The introduction of p60 into these cells generates a high affinity IL-5 receptor. The second subunit of the IL-5 receptor is identical with the larger subunit of the receptor for the colony stimulating factor GM-CSF (CD131). This subunit is involved also in the generation of a high affinity receptor for IL-3 and is being referred to as common beta.</p>
Functions	The ED(50) was determined by the dose-dependent proliferation of TF-1 cells was ? 0.2 ng/mL, corresponding to a specific activity of ? 6.0 x 10 ⁶ units/mg.
Formulation	Recombinant rat Interleukin-5 was lyophilized from a 0.2 ?m filtered PBS solution.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	13
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage
Condition

The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

