

Recombinant Human IL-5 (ELISA Std.)

Catalog# / Size	571909 / 4 pack
Regulatory Status	RUO
Other Names	Interleukin-5, Eosinophil differentiation factor (EDF), Eosinophil colony stimulating factor (Eo-CSF), B cell growth factor-2 (BCGF-2), B cell differentiation factor for IgM (BCDF-m), IgA enhancing factor (IgA-EF), T cell replacing factor-1 (TRF-1)
Description	IL-5 is a homodimeric, disulphide-linked protein produced by T-cells. Monomeric human IL-5 is a 126 amino acid protein with a reported molecular weight of 26 kD for the homodimeric protein. Mouse and human IL-5 are approximately 70% identical. IL-5 has been shown to promote the growth of immature hematopoietic BFU-E progenitors, stimulate the activation and differentiation of eosinophils, and promote the generation of cytotoxic lymphocytes.

Product Details

Source	<i>E. coli</i> , approximately 26 kD
Formulation	Lyophilized in sterile-filtered PBS, pH 7.2, containing 1% BSA, 0.09% sodium azide, and protease inhibitors.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	Upon receipt, store unopened vials between 2°C and 8°C immediately and use within 12 months from date of receipt. Prior to use, reconstitute the lyophilized powder with 0.2 ml of PBS containing a carrier protein (e.g., 1% BSA, protease free), pH7.4. Re-cap vial, vortex. Allow the reconstituted standard to sit at room temperature for 15 minutes, vortex again to mix completely. The reconstituted standard stock solution can be aliquoted into polypropylene vials and stored at -70°C for up to one month. Do not re-use diluted standards. Use a manual defrost freezer and avoid repeated freeze thaw cycles.
Application	ELISA
Recommended Usage	Each lot of this protein is quality control tested by ELISA assay . For use as an ELISA standard, a standard curve comprised of doubling dilutions from 500 pg/ml to 4 pg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This IL-5 protein is useful as a standard for a human IL-5 sandwich ELISA, using unlabeled JES1-39D10 antibody (catalog #500902) for capture and biotinylated JES1-5A10 antibody (catalog #501002) for detection.

Antigen Details

Structure	Cytokine; dimer
Bioactivity	Growth/differentiation of eosinophils; proliferation/cell activation/differentiation of eosinophilic granulocytes
Cell Sources	Mast cells, T cells, bone marrow stromal cells
Cell Targets	Eosinophils
Receptors	Heterodimer IL-5R α (CD125); β -subunit (CDw131) in common with IL-3R, GM-CSFR
Biology Area	Immunology, Cell Biology
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none"> 1. Fitzgerald K, <i>et al.</i> Eds. 2001. The Cytokine FactsBook. Academic Press San Diego. 2. Takatsu K, <i>et al.</i> 1988. <i>Immunol. Rev.</i> 102:107. 3. Takatsu K. 1992. <i>Curr. Opin. Immunol.</i> 4:299. 4. Takatsu K. 1991. <i>Microbiol. Immun.</i> 35:593.

Regulation

Upregulated by IL-2, platelet activating factor; downregulated by TGF- β

Gene ID

[3567](#)

Related Protocols

[Sandwich ELISA Protocol](#)

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