

Recombinant Mouse IL-13 (carrier-free)

Catalog # / Size: 575902 / 10 µg
575904 / 25 µg
575906 / 100 µg
575908 / 500 µg

Source: Mouse IL-13, amino acids Ser26-Phe131 (Accession # NM_008355), was expressed in *E. coli*.

Molecular Mass: The 106 amino acid recombinant protein has a predicted molecular mass of 11,677 Da. The DTT-reduced protein migrates at approximately 9kDa and the non-reduced protein migrates at approximately 8kDa by SDS-PAGE. The N-terminal amino acid is Serine.

Purity: Purity is >98%, as determined by Coomassie stained SDS-PAGE.

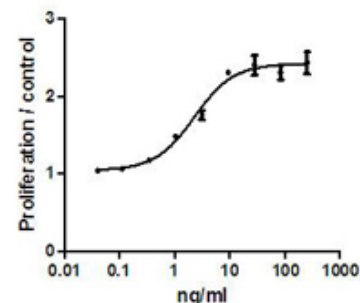
Endotoxin Level: Endotoxin level is <0.1 EU/µg (<0.01ng/µg) protein as determined by the LAL method.

Activity: ED50 = 1.5 to 3.5 ng/ml, corresponding to a specific activity of 6.6 to 2.85 x 10⁵ units/mg, as determined by the dose dependent stimulation of TF-1 cells proliferation.

Preparation: 10-100µg sizes are bottled at 200µg/mL. 500µg sizes and larger are bottled at the concentration indicated on the vial.

Formulation: 0.22 µm filtered protein solution is in 10mM NaH₂PO₄, 150mM NaCl, pH 7.2.

Storage: Unopened vial can be stored at 4°C for three months, at -20°C for six months, or at -70°C for one year. For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10µg/mL in buffer containing carrier protein such as 1% BSA or HSA or 10% FBS. For long term storage, aliquot into polypropylene vials and store in a manual defrost freezer. **Avoid repeated freeze/thaw cycles.**



TF-1 cells proliferation induced by mouse IL-13.

Applications:

Applications: Bioassay

Description: Mouse IL-13 was initially cloned from cDNA libraries of activated T cells and was designated as P600. IL-13 is an immunoregulatory cytokine secreted predominantly by activated T(H)2 cells, and it is a key mediator in the pathogenesis of allergic inflammation. IL-13 shares many functional properties with IL-4, and they share a common receptor subunit, the alpha subunit of the IL-4 receptor (IL-4Ralpha). IL-13 mediates its effects by interacting with a complex receptor system comprised of IL-4Ralpha and two IL-13 binding proteins, IL-13Ralpha1 and IL-13Ralpha2. Ligation of the IL-13 receptor complex results in signaling via the insulin receptor substrate (IRS)-1 and 2 and SH2B3 pathways. Interleukin-13 (IL-13), like IL-4, is a cytokine produced by T(H)2 type helper T cells in response to signaling through the T cell antigen receptor and by mast cells and basophils upon cross-linkage of the high-affinity receptor for immunoglobulin E (IgE). IL-13 has been implicated in airway hypersensitivity and mucus hypersecretion, inflammatory bowel disease, and parasitic nematode expulsion.

- Antigen References:**
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 4. Kelly-Welch, *et al. Science Signaling* 293:2005.
 5. Hershey GK *J Allergy Clin Immunol* 111:677-690 2003.
 6. Harris J, *et al. Immunity* 27:505-517 2007.
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