

Datasheet for ABIN2666703
IL-13 Protein (AA 21-132)



[Go to Product page](#)

Overview

Quantity:	10 µg
Target:	IL-13 (IL13)
Protein Characteristics:	AA 21-132
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Flow Cytometry (FACS)

Product Details

Purity:	Purity is > 98 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Endotoxin level is < 0.1 EU/µg (< 0.01ng/µg) protein as determined by the LAL method.

Target Details

Target:	IL-13 (IL13)
Alternative Name:	IL-13 (IL13 Products)
Background:	Human IL-13 was initially cloned from cDNA libraries of activated T cells. 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-

Target Details

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 STAT-6 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.

Molecular Weight: The 112 amino acid recombinant protein has a predicted molecular mass of 12,344 Da. The DTT-reduced and non-reduced protein migrate at approximately 9kDa by SDS-PAGE. The N-terminal amino acid is Glycine.

Pathways: [JAK-STAT Signaling](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Proton Transport](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Biological activity: The ED50 is 1.5 to 3ng/ml, corresponding to a specific activity of 6.6 -- 3.3 x 105units/mg, as determined by the dose dependent stimulation of TF-1 cells proliferation.

Restrictions: For Research Use only

Handling

Format: Liquid

Reconstitution: For maximum results, quick spin vial prior to opening. The protein can be aliquoted and stored from -20 °C to -70 °C. Stock solutions can also be prepared at 50-100 µg/mL in sterile buffer (PBS, HPBS, DPBS, or EBSS) containing carrier protein such as 0.2-1 % BSA or HSA and stored in working aliquots at -20 °C to -70 °C.

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

Handling Advice: Avoid repeated freeze/thaw cycles.

Storage: -20 °C

Storage Comment: Unopened vial can be stored between 2°C and 8°C for one month, at -20°C for six months, or at -70°C for one year.