Recombinant Human IL-13 Protein

Catalog No.: RP01320 Recombinant 2 Publications

Sequence Information

Species Gene ID Swiss Prot HEK293 cells 3596 P35225

Tags

C-His

Synonyms IL13;IL-13;P600

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-
	PAGE.

Endotoxin

< 0.1 EU/µg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

www.abclonal.com

Background

Interleukin 13 (IL13) is also known as ALRH, and P600, is a single-chain glycosylated polypeptide, and is a cytokine critical in regulating inflammatory and immune responses. IL13 is secreted by many cell types, but especially by T helper type 2 (Th2) cells. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4R α) and at least one of two known IL-13-specific binding chains. As a cytokine, IL-13 protein is critical in regulating inflammatory, immune responses, and diseases. Also, it inhibits the production of pro-inflammatory cytokines and chemokines, and thus downregulates macrophage activity. IL-13 protein and antibody are more importantly implicated as a central mediator of immunoregulatory processes in various cell types.

Basic Information

Description

Recombinant Human IL-13 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gly35-Asn146) of Human IL13 (Accession #NP_002179.2) fused with an 6×His tag at the C-terminus.

Bio-Activity

Measured in a cell proliferation assay using TF-1 Human erythroleukemic cells. The ED₅₀ for this effect is 1-4 ng/mL, corresponding to a specific activity of 0.25 × 10⁶~1.0× 10⁶ units/mg.

Storage

Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.



Validation Data

170kDa — 130kDa — 100kDa — 70kDa —	
55kDa —	
40kDa —	
35kDa —	
25kDa —	
15kDa —	
10kDa —	-

Recombinant Human IL-13 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human IL-13 stimulates cell proliferation of the TF-1 Human erythroleukemic cells. The ED_{s0} for this effect is 1-4 ng/mL, corresponding to a specific activity of $0.25 \times 10^6 \sim 1.0 \times 10^6$ units/mg.