

Product Data Sheet

IL-13 Protein, Human (HEK293, His-Avi)

Cat. No.:	HY-P78461
Synonyms:	IL13; IL-13; interleukin 13; NC30; P600; ALRH; BHR1; MGC116786; MGC116788; MGC116789
Species:	Human
Source:	HEK293
Accession:	P35225 (G35-N146)
Gene ID:	3596
Molecular Weight:	Approximately 15 kDa & 25-45 kDa

PROPERTIES	
Biological Activity	 Immobilized Human IL-13, His Tag at 5µg/ml (100µl/Well). Dose response curve for Human IL-13Ra1, hFc Tag with the EC₅₀ of 4.7µg/ml determined by ELISA. Immobilized Human IL-13, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human IL-13Ra2, hFc Tag with the EC₅₀ of 1.9µg/ml determined by ELISA.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Normally 5% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

BackgroundInterleukin-13 (IL-13) is a cytokine which is secreted by T helper type 2 (Th2) cells, CD4 cells, natural killer T cell, mast cells,
basophils, eosinophils and nuocytes. IL-13 is a central regulator in IgE synthesis, goblet cell hyperplasia, mucus
hypersecretion, airway hyperresponsiveness, fibrosis and chitinase up-regulation. The circular dichroism spectrum confirms
that interleukin-13 belongs to the alpha-helical family of cytokines. IL-13 synergizes with IL2 in regulating interferon-gamma
synthesis. IL-13 exerts its biological effects through the IL4R chain and the IL13RA1 chain, to activate JAK1, TYK2 and STAT6.
IL-13 affects the morphology, growth, and surface antigen expression and phenotype of monocytes and stimulates B-cell
proliferation, and activation of eosinophils, basophils, and mast cells. In human macrophages and monocytes, hIL-13 has
been shown to inhibit HIV replication. Human IL-13 also inhibits proinflammatory cyto-kines induced by LPS exposure,
indicating poten-tial therapeutic applicationsas an anti-inflammatory agent^{[1][2][3][4][5][6]}.

Caution: Product has not been fully validated for medical applications. For research use only.

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