

Recombinant human IL13

Catalog No: #AG0010

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Description

Product Name	Recombinant human IL13
Host Species	HEK293
Purification	> 95% by Tris-Bis PAGE;> 95% by SEC-HPLC
Immunogen Description	Leu25-Asn146
Target Name	IL13
Other Names	Human IL-13, h-IL-13, rh-IL-13, recombinant IL-13, interleukin-13
Accession No.	Uniprot:P35225Gene ID:3596
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GeneID	3596
Target Species	human
Calculated MW	13.3 KDa
Tag Info	additional amino acid free
Formulation	0.22 µm filtered solution of PBS, pH 7.4.
Storage	Aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.

Background

Interleukin-13 (IL-13) is a monomeric 17 kDa immunoregulatory cytokine that plays a key role in the pathogenesis of allergy, cancer, and tissue fibrosis. It is secreted by several helper T cell subsets, NK cells, mast cells, eosinophils, basophils, and visceral smooth muscle cells (1,3). Mature human IL-13 shares approximately 58% amino acid sequence identity with mouse and rat IL-13. Despite the low homology, it exhibits cross-species activity between human, mouse, and rat (4). IL-13 suppresses the production of proinflammatory cytokines and other cytotoxic substances by macrophages, fibroblasts, and endothelial cells. On B cells, it promotes cellular activation, immunoglobulin class switching to IgE, and the up-regulation of CD23/Fc epsilon RII (1,25). IL-13 binds with low affinity to the transmembrane IL-13 R alpha 1 which then forms a signaling complex with the transmembrane IL-4 R alpha (6,8). This high affinity receptor complex also functions as the type 2 IL-4 receptor (6,7). IL-13 R alpha 2 inhibits responses to both IL-13 and IL-4. It binds IL-13 with high affinity (9, 10) and prevents IL-13 from signaling through the IL-13 R alpha 1/IL-4 R alpha complex (11,12). It also blocks signaling through IL-4-occupied IL-13 R alpha 1/IL-4 R alpha receptor complexes (12, 13). In addition, IL-13-bound IL-13 R alpha 2 can directly promote tumor cell invasiveness and the development of tissue fibrosis (14,16).

Note: This product is for in vitro research use only