

Human IL-13 Protein; His Tag

Product Information

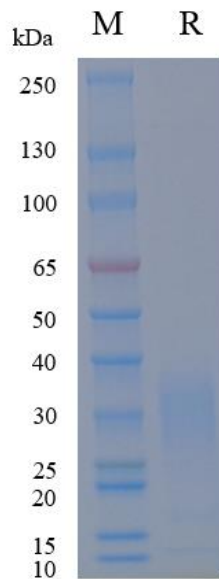
Product Name	Human IL-13 Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88040RP-100 / 100 μg GM-88040RP-1000 / 1 mg

Protein Information

Alternative Names	IL13, ALRH, BHR1, MGC116786, MGC116788, MGC116789, Interleukin-13
Source	Human IL-13 Protein; His Tag (GM-88040RP) is expressed from human 293 cells (HEK-293). It contains AA Gly 35 - Asn 146 (Accession # P35225). This protein carries a His tag at the C-terminus.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	13.1 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	<p>IL-13 is a pleiotropic cytokine produced mainly by Th2 cells, ILC2s, mast cells, and eosinophils. It signals through the IL-4Rα chain, often in conjunction with the γc or IL-13Rα1, activating downstream pathways such as STAT6, driving type 2 immune responses, promoting IgE class switching, mucus production, airway hyperresponsiveness, eosinophilic inflammation, and tissue remodeling. IL-13 is closely involved in the pathogenesis of diseases such as asthma and allergic rhinitis and certain fibrotic states, and it also participates in defense against parasites.</p> <p>The IL-13 gene is located in a region with upstream and downstream shared elements, and its expression is regulated by transcription factors responsive to Th2-skewing signals, such as GATA3 and STAT6. IL-13 signaling can be regulated by receptor availability, soluble decoys, and genetic variants that affect receptor binding or expression. Therapeutic strategies targeting IL-13 or its signaling axis (for example, monoclonal antibodies against IL-13 or IL-4Rα) have shown efficacy in reducing mucus hypersecretion, airway inflammation, and remodeling in various allergic diseases, highlighting the key role of IL-13 in type II (Type 2) immunity.</p>

Version:4.0

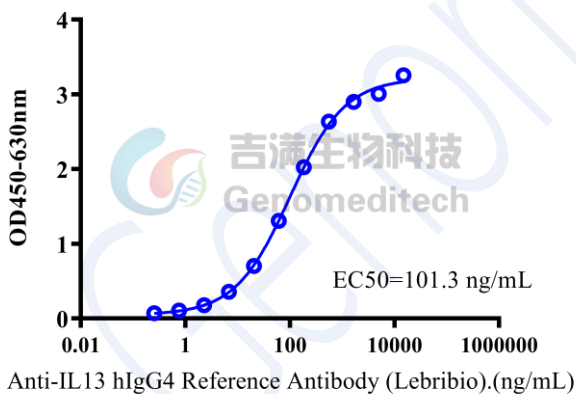
SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

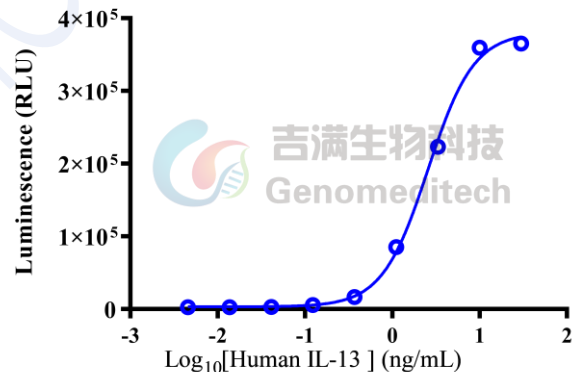
Bioactivity-ELISA
0.6 μ g Anti-His mIgG2a Antibody+0.5 μ g Human IL-13 Protein; His Tag of per well



Human IL-13 Protein; His Tag (Catalog # GM-88040RP) was immobilized at 5 μ g/ml (100 μ L/well) on Anti-His mIgG2a Antibody (Catalog # GM-59493AB) (0.6 μ g/well) precoated. Increasing concentrations of Anti-IL13 hIgG4 Reference Antibody (Lebribo) (Catalog # GM-88031MAB) were added.

Bioactivity-CELL BASE

IL-4/IL-13 Reporter 293 Cell Line



	Human IL-13 Protein
EC50	2.569

Human IL-13 Protein; His Tag (Catalog # GM-88040RP) was added into IL-4/IL-13 Reporter 293 Cell Line (Catalog # GM-C01511) and stimulates related signals.