

Human IL-13RA1 Protein; His Tag

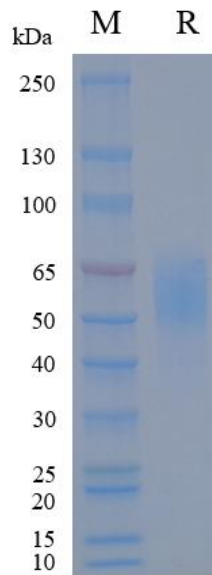
Product Information

Product Name	Human IL-13RA1 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-88041RP-100 / 100 μg GM-88041RP-1000 / 1 mg

Protein Information

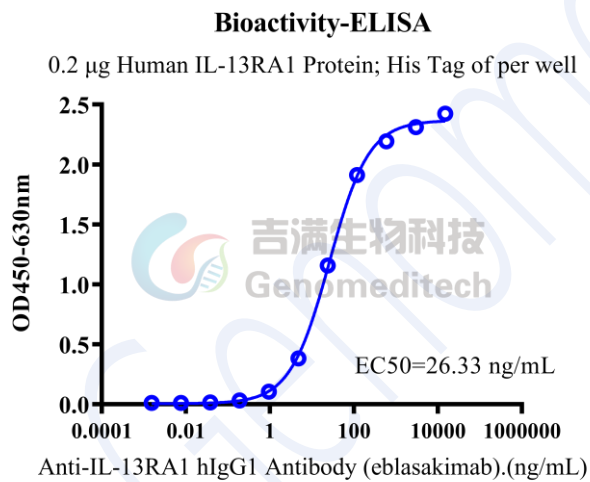
Alternative Names	IL13RA1, CD213A1, IL-13Ra, NR4, RP13-128O4.2, IL13R α 1
Source	Human IL-13RA1 Protein; His Tag (GM-88041RP) is expressed from human 293 cells (HEK-293). It contains AA Gly 22 - Thr 343 (Accession # P78552-1). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	37.7 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	IL13RA1 is a component of the type II IL-4 receptor. It is a single-pass transmembrane protein encoded by the IL13RA1 gene and expressed on various cells, including macrophages, dendritic cells, some lymphocytes, and some non-hematopoietic cells. It partners with IL4R α to form the IL-13 receptor, modulating allergic inflammation, Th2 responses, and tissue remodeling. Dysregulation of IL-13 signaling via IL13RA1 links to atopy and fibrosis. IL-13 binding to the IL13RA1/IL4R α complex activates JAK-STAT signaling, mainly inducing STAT6 phosphorylation and transcription of IL-4/IL-13-responsive genes. It also engages PI3K-AKT and MAPK pathways, affecting epithelial barrier, mucus production, and chemokine/cytokine expression. Cross-talk with IL-4 can amplify responses. Aberrant IL-13/IL13RA1 signaling is associated with allergic diseases, fibrosis, and inflammation, making this axis a therapeutic target.

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 95%.

Bioactivity-ELISA



Human IL-13RA1 Protein; His Tag (Catalog # GM-88041RP) was immobilized at 2 μ g/ml (100 μ L/well). Increasing concentrations of Anti-IL-13RA1 hIgG1 Antibody (eblasakimab) (Catalog # GM-88181AB) were added.