

Human IL-1RL1 Protein; hFc Tag

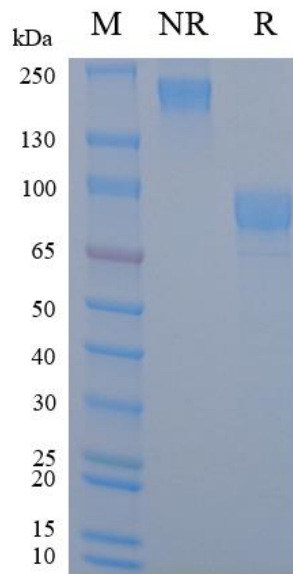
Product Information

Product Name	Human IL-1RL1 Protein; hFc 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-88162RP-100 / 100 μg GM-88162RP-1000 / 1 mg

Protein Information

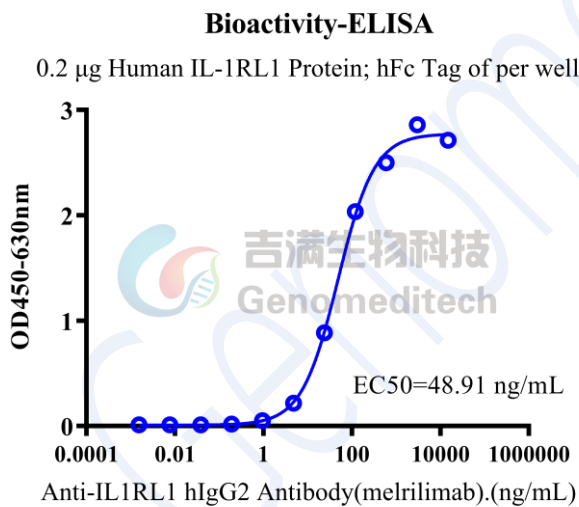
Alternative Names	IL1RL1, DER4, FIT-1, IL33R, ST2, ST2L, ST2V, T1
Source	Human IL-1RL1 Protein; hFc Tag (GM-88162RP) is expressed from human 293 cells (HEK-293). It contains AA Lys 19 - Pro 323 (Accession # NP_003847). This protein carries a human IgG1 Fc tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	60.3 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	<p>IL-1 receptor-like 1 (IL1RL1), known as ST2, belongs to the IL-1 receptor superfamily. ST2 has two main isoforms: transmembrane ST2L (receptor) and soluble sST2 (decoy regulating IL-33 signaling). IL1RL1/ST2 is mainly expressed in immune cells (Th2, mast cells, eosinophils, ILCs) and in endothelial/epithelial tissues. The ST2/IL-33 axis promotes type 2 immunity, tissue repair, and inflammation; its dysregulation links to asthma, allergic rhinitis, and cardiovascular diseases.</p> <p>IL-33 binding to ST2L recruits IRAK and MyD88, activating NF-κB, MAPKs (p38, JNK, ERK), and AP-1, driving transcription of type 2 cytokines (IL-4, IL-5, IL-13) and chemokines to recruit eosinophils and enhance mucus production. sST2 sequestration of IL-33 dampens ST2L signaling. Some ST2L-independent signaling occurs in certain cells, with crosstalk to other TLR/IL-1 pathways adding complexity. Dysregulated IL-33/ST2 signaling contributes to chronic inflammation and fibrosis, making it a therapeutic target.</p>

SDS-PAGE



On SDS-PAGE under non-reducing (NR) condition and reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Human IL-1RL1 Protein; hFc Tag (Catalog # GM-88162RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-IL1RL1 hIgG2 Antibody(melrilimab) (Catalog # GM-88366AB) were added.