

Human IL-1RI Protein; hFc Tag

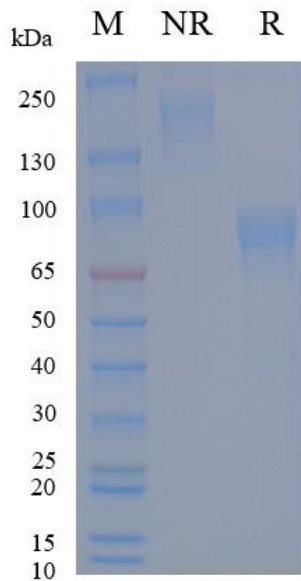
Product Information

Product Name	Human IL-1RI 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-88249RP-100 / 100 μg GM-88249RP-1000 / 1 mg

Protein Information

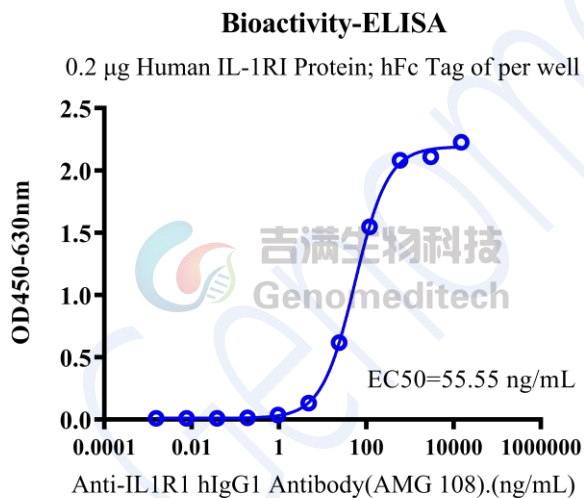
Alternative Names	IL-1R-1; IL-1RT-1; IL-1RT1; CD121a
Source	Human IL-1RI Protein; hFc Tag (GM-88249RP) is expressed from human 293 cells (HEK-293). It contains AA Leu 18 - Lys 336 (Accession # P14778). This protein carries a hFc tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	62.6 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH 7.2-7.4.
Description	Interleukin-1 receptor type I (IL-1RI) is a transmembrane receptor central to inflammatory responses. It binds IL-1α and IL-1β, triggering signaling that promotes immune activation, fever, and acute-phase reactions. IL-1RI is widely expressed on many cell types (e.g., macrophages, endothelial and epithelial cells) and forms a signaling complex with IL-1RAcP. Dysregulation of IL-1RI signaling is linked to inflammatory diseases, making it a key therapeutic target. Paragraph 2 – Signaling pathway IL-1 binding recruits IL-1RAcP and MyD88, activating IRAKs and TRAF6, which then stimulate the IKK complex. This leads to IκB phosphorylation/degradation and NF-κB nuclear translocation, driving pro-inflammatory gene transcription. The pathway also activates MAP kinases (p38, JNK, ERK). Cross-talk with other pathways modulates the response, and regulators like receptor antagonists and decoy receptors help prevent excessive inflammation.

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-1RI Protein; hFc Tag (Catalog # GM-88249RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-IL1R1 hIgG1 Antibody(AMG 108) (Catalog # GM-51990AB) were added.