

Human IL-18R beta Protein; hFc Tag

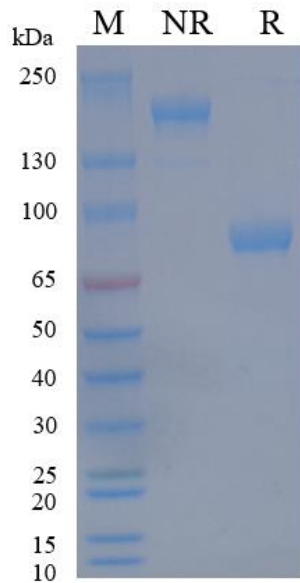
Product Information

Product Name	Human IL-18R beta 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-88314RP-100 / 100 μg GM-88314RP-1000 / 1 mg

Protein Information

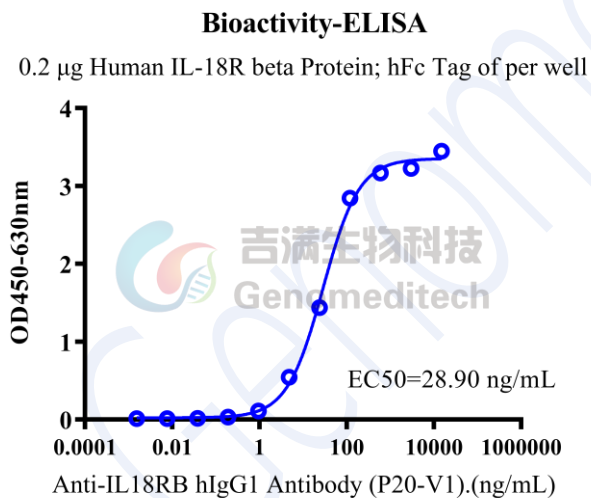
Alternative Names	IL-18 R beta, IL-1 R7, CD218b, CDw218b, IL-1 R7, IL18R beta, IL-18RAcP
Source	Human IL-18R beta Protein; hFc Tag (GM-88314RP) is expressed from human 293 cells (HEK-293). It contains AA Phe 20 - Arg 356 (Accession # O95256-1). This protein carries a hFc tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	64.4 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	Interleukin-18 receptor beta (IL-18Rβ) is a transmembrane subunit that forms part of the IL-18 receptor complex. IL-18Rβ pairs with IL-18 receptor alpha (IL-18Rα) to create a high-affinity receptor for interleukin-18 (IL-18), a pro-inflammatory cytokine produced by macrophages and other cells. The IL-18-IL-18Rα-IL-18Rβ complex initiates signaling that links innate and adaptive immune responses, contributing to the production of interferon-gamma (IFN-γ) and the activation of T cells and natural killer (NK) cells. Upon IL-18 binding, IL-18Rα and IL-18Rβ recruit adaptor proteins, notably MyD88, which activates downstream pathways including the NF-κB and MAPK cascades. This leads to transcription of inflammatory genes (e.g., IFN-γ, TNF-α) and enhanced cytotoxic and macrophage responses. The IL-18/IL-18R system plays a key role in defenses against intracellular pathogens but can contribute to chronic inflammatory diseases when dysregulated; thus, it is a potential target for therapeutic modulation in autoimmune and inflammatory conditions.

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-18R beta Protein; hFc Tag (Catalog # GM-88314RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-IL18RB hIgG1 Antibody (P20-V1) (Catalog # GM-88328AB) were added.