

Human IL-18R alpha Protein; hFc Tag

Product Information

Product Name Human IL-18R alpha Protein; hFc Tag

Storage temp Store at \leq -70°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-88313RP-100 / 100 μ g

GM-88313RP-1000 / 1 mg

Protein Information

Alternative Names IL18R1, IL1RRP, CD218a, IL18Ra

Source Human IL-18R alpha Protein; hFc Tag (GM-88313RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 19 - Arg 329 (Accession # AAH69575). This protein carries a human IgG1 Fc tag at the C-terminus.

Purity > 95% as determined by SDS-PAGE

Endotoxin < 1 EU/ μ g, determined by LAL gel clotting assay

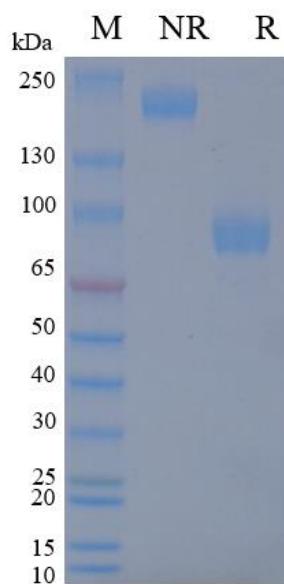
Predicted Mol Mass 61.7 KDa

Formulation Supplied as a 0.2 μ m filtered solution of PBS, pH7.2-7.4.

Description IL-18R α is the primary subunit of the IL-18 receptor. It binds IL-18 with the assistance of IL-18R β to form a functional receptor complex on surface immune cells, including T cells, natural killer (NK) cells, and macrophages. The receptor features extracellular Ig-like domains that recognize IL-18, a single-pass transmembrane (TM) region, and an intracellular signaling tail that participates in downstream cascades. Expression of IL-18R α varies by cell type and is commonly upregulated in response to inflammatory cues, enhancing cellular responsiveness to IL-18.

When IL-18 engages IL-18R α , IL-18R β is recruited to assemble a heterotrimeric receptor complex, which then initiates intracellular signaling via MyD88 and other adaptor proteins. This then activates downstream kinases such as IRAKs and TRAF6, culminating in the activation of transcription factors NF- κ B and AP-1. The result is the increased production of pro-inflammatory cytokines (e.g., IFN- γ , TNF- α) and chemokines that drive Th1-skewed responses and bolster innate immune activation.

SDS-PAGE

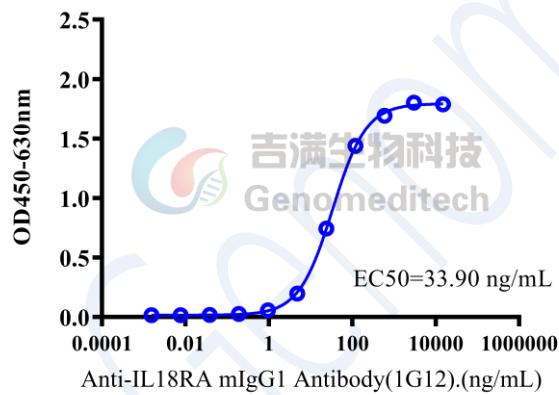


On SDS-PAGE under non-reducing (NR) condition and reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

Bioactivity-ELISA

0.2 µg Human IL-18R alpha Protein; hFc Tag of per well



Human IL-18R alpha Protein; hFc Tag (Catalog # GM-88313RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-IL18RA mIgG1 Antibody(1G12) (Catalog # GM-88327AB) were added.