

Cynomolgus IL-1 beta Protein; His Tag

Product Information

Product Name Cynomolgus IL-1 beta Protein; His 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-88337RP-100 / 100 μ g

GM-88337RP-1000 / 1 mg

Protein Information

Alternative Names IL1B, IL-1BETA, IL1F2, IL-1 β

Source Cynomolgus IL-1 beta Protein; His Tag (GM-88337RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 117 - Ser 268 (Accession # P79182-1). This protein carries a His tag at the N-terminus.

Purity > 95% as determined by SDS-PAGE

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

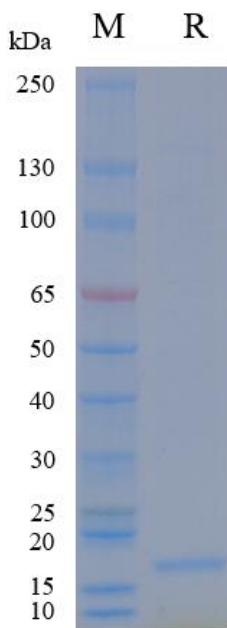
Predicted Mol Mass 18.0 KDa

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

Description The IL-1 family includes IL-1 α (IL1A) and IL-1 β (IL1B), both of which are important pro-inflammatory cytokines. IL-1 α is typically matured intracellularly and can exist in membrane-bound or cytosolic forms; upon damage or stress, it is released and initiates inflammatory signaling via the IL-1R1/IL-1RAcP complex. IL-1 β is secreted after processing by inflammasomes (e.g., NLRP3) that cleave the precursor, forming a classic paracrine signal. Both activate downstream pathways through the IL-1R1/IL-1RAcP axis, promoting the expression of pro-inflammatory genes such as IL-6, IL-8, and TNF- α , participating in inflammation, immune cell recruitment, and tissue repair; however, their sources, processing, and release mechanisms differ significantly.

The amplification of IL-1 signaling mainly occurs through a MyD88-dependent cascade, activating the IKK/NF- κ B and MAPK pathways (including p38, ERK, and JNK), rapidly promoting transcription and post-transcriptional regulation. In addition to paracrine spread, IL-1 α / β can also be released into the cytosol under stress and directly interact with receptors on neighboring cells, shaping a localized inflammatory microenvironment.

SDS-PAGE

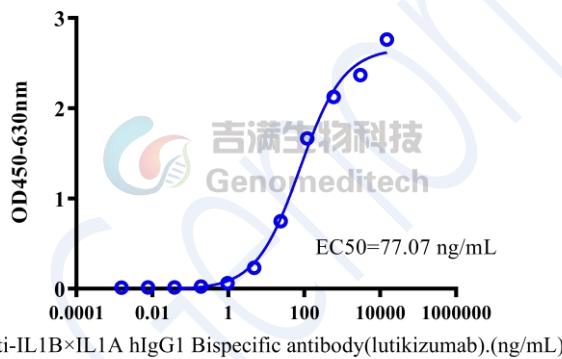


On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

Bioactivity-ELISA

0.2 μ g Cynomolgus IL-1 beta Protein; His Tag of per well



Cynomolgus IL-1 beta Protein; His Tag (Catalog # GM-88337RP) was immobilized at 2 μ g/ml (100 μ L/well). Increasing concentrations of Anti-IL1B×IL1A hIgG1 Bispecific antibody(lutikizumab) (Catalog # GM-88265AB) were added.