

Human TNFR1 Protein; hFc Tag

Product Information

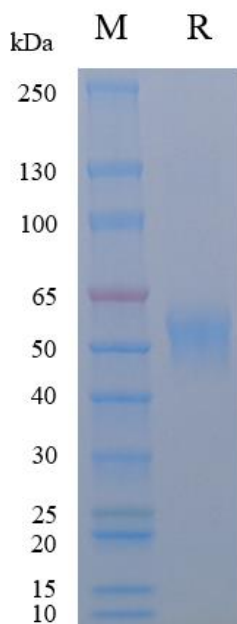
Product Name	Human TNFR1 Protein; hFc Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88212RP-100 / 100 μg GM-88212RP-1000 / 1 mg

Protein Information

Alternative Names	TNFR1, CD120a, TNFRSF1A, FPF, TBP1, TNF-R-I, TNF-R55, TNFAR
Source	Human TNFR1 Protein; hFc Tag (GM-88212RP) is expressed from human 293 cells (HEK-293). It contains AA Leu 30 - Thr 211 (Accession # P19438-1). 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	46.4 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	TNF receptors 1 and 2 (TNFR1 and TNFR2) mediate the effects of tumor necrosis factor (TNF). TNFR1, found on most nucleated cells, has a death domain and can trigger apoptosis or NF-κB/MAPK-mediated survival signals, activated by both soluble and membrane-bound TNF. TNFR2, mainly on immune and endothelial cells (lacks a death domain), promotes cell survival and regulatory T cell function via NF-κB and related pathways, often in response to membrane-bound TNF. The two receptors can form heterotrimers and modulate each other's signaling, reflecting TNF biology's complexity. TNF-α signals primarily through its receptors TNFR1 (p55) and TNFR2 (p75), triggering multiple pathways. TNFR1 activation commonly leads to NF-κB and MAPK signaling, promoting transcription of inflammatory genes, survival factors, and sometimes apoptosis via caspase cascades. TNFR2 mainly modulates immune cell activation and can enhance TNF-α-driven responses. Cross-talk with other cytokines shapes the intensity and duration of inflammation. Therapeutically, TNF-α inhibitors are used to treat autoimmune diseases, but neutralization must balance infection risk and immune suppression.

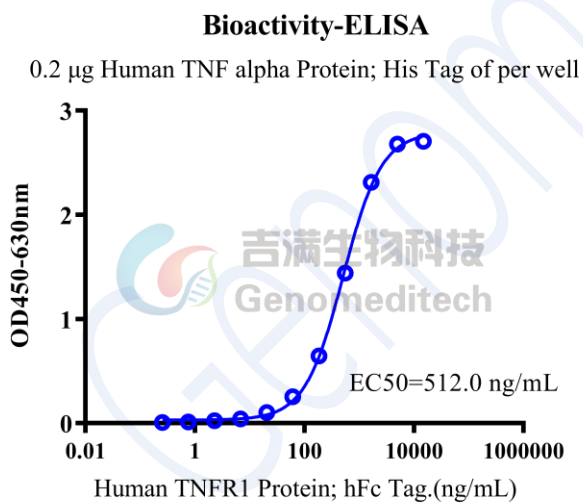
Version:4.0

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



Human TNF alpha Protein; His Tag (Catalog # GM-88209RP) was immobilized at 2 μ g/ml (100 μ L/well). Increasing concentrations of Human TNFR1 Protein; hFc Tag (Catalog # GM-88212RP) were added.