Genomeditech (Shanghai) Co.,Ltd.
Order: 021-68455258/50432826/50432825
Toll-free: 400 627 9288
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Human TREM2 Protein; hFc Tag

Product Information

Product Name	Human TREM2 Protein; hFc Tag
Storage temp	Store at ≤ -70℃, 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-88453RP-100 / 100 μg** **GM-88453RP-1000 / 1 mg**

Protein Information

Alternative Names	Triggering receptor expressed on myeloid cells 2, TREM-2
Source	Human TREM2 Protein; hFc Tag (GM-88453RP) is expressed from human 293 cells (HEK-293). It contains AA His 19 - Ser 174 (Accession # Q9NZC2-1). This protein carries a human IgG1 Fc 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	43.4 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	TREM2 is a type I transmembrane receptor expressed mainly on myeloid cells, including microglia, macrophages, and dendritic cells. It belongs to the triggering receptor expressed on myeloid cells (TREM) family and forms a signaling complex with the adaptor protein DAP12 (TYROBP). TREM-2 plays a key role in modulating innate immune responses, promoting phagocytosis, and influencing microglial activation and survival. Genetic variants in TREM2 have been linked to increased risk of neurodegenerative diseases, including Alzheimer's disease, underscoring its importance in CNS homeostasis and inflammation. TREM-2 associates with DAP12, whose ITAM is phosphorylated to recruit Syk kinase and propagate signaling cascades. This leads to activation of downstream pathways such as PI3K-Akt, ERK, and NF-κB, promoting cytoskeletal rearrangements, phagocytosis, and anti-inflammatory responses. In microglia, TREM-2 signaling supports debris clearance and neuronal support, while certain mutations or dysregulation can impair microglial function and contribute to neurodegenerative pathology.

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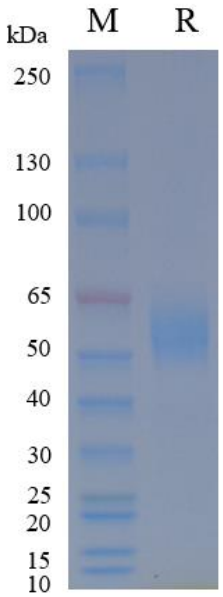
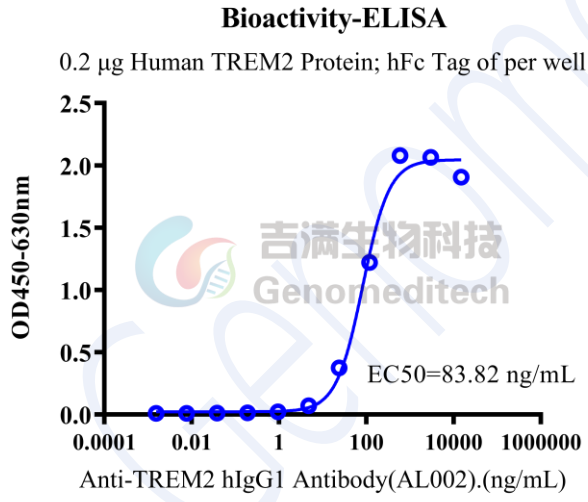
SDS-PAGE



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 TREM2 Protein; hFc Tag (Catalog # GM-88453RP) was immobilized at 2 μg/ml (100 μL/well). Increasing concentrations of Anti-TREM2 hIgG1 Antibody(AL002) (Catalog # GM-88284AB) were added.