

# Human TREM1 Protein; His Tag

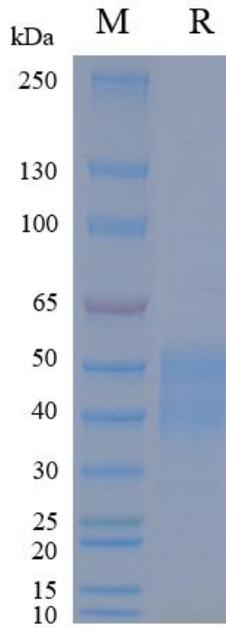
## Product Information

<b>Product Name</b>	Human TREM1 Protein; His Tag
<b>Storage temp</b>	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.
<b>Catalog# / Size</b>	<b>GM-88422RP-100 / 100 <math>\mu\text{g}</math></b> <b>GM-88422RP-1000 / 1 mg</b>

## Protein Information

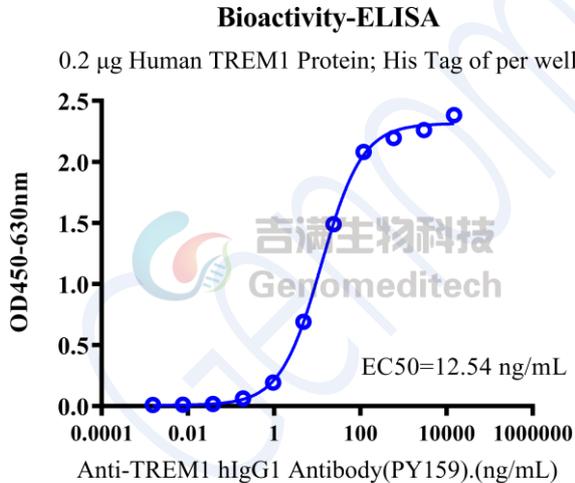
<b>Alternative Names</b>	TREM1, CD354
<b>Source</b>	Human TREM1 Protein; His Tag (GM-88422RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 21 - Arg 200 (Accession # Q9NP99-1). This protein carries a His tag at the C-terminus.
<b>Purity</b>	> 95% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
<b>Predicted Mol Mass</b>	21.1 KDa
<b>Formulation</b>	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
<b>Description</b>	TREM-1 (Triggering Receptor Expressed on Myeloid cells-1) is a cell-surface Ig superfamily receptor mainly on neutrophils and monocytes/macrophages. It amplifies inflammatory responses by boosting proinflammatory cytokines/chemokines after activation. It acts as an amplifier of signals from pattern recognition receptors (e.g., TLRs) and contributes to host defense as well as inflammatory/septic pathogenesis. TREM-1 is modulated by the adaptor DAP12, which contains an ITAM for downstream signaling. Ligand engagement crosslinks TREM-1 with DAP12, phosphorylating the ITAM via Src kinases. This recruits Syk, triggering a cascade that activates NF- $\kappa\text{B}$ and MAPKs (ERK, p38, JNK). This leads to transcription of TNF- $\alpha$ , IL-1 $\beta$ , IL-6, and chemokines. TREM-1 signaling can amplify TLR signals and is shaped by cross-talk with other receptors, as well as regulation by soluble TREM-1 and inhibitory receptors to limit excessive inflammation.

## SDS-PAGE

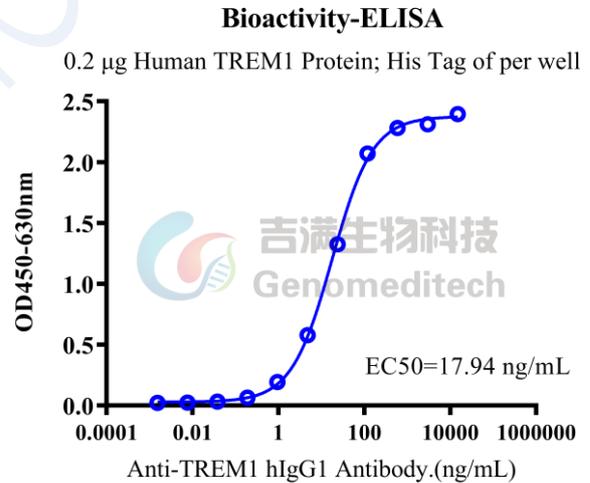


On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity-ELISA

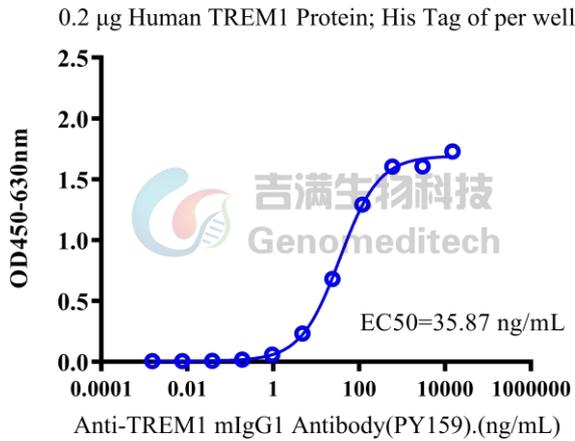


Human TREM1 Protein; His Tag (Catalog # GM-88422RP) was immobilized at 2  $\mu$ g/ml (100  $\mu$ L/well). Increasing concentrations of Anti-TREM1 hIgG1 Antibody(PY159) (Catalog # GM-88438AB) were added.



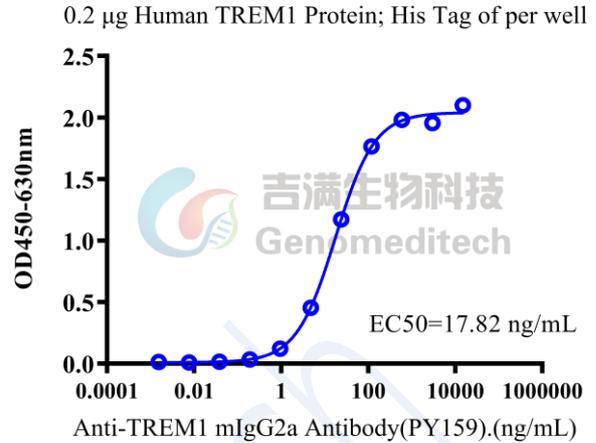
Human TREM1 Protein; His Tag (Catalog # GM-88422RP) was immobilized at 2  $\mu$ g/ml (100  $\mu$ L/well). Increasing concentrations of Anti-TREM1 hIgG1 Antibody (Catalog # GM-26835AB) were added.

**Bioactivity-ELISA**



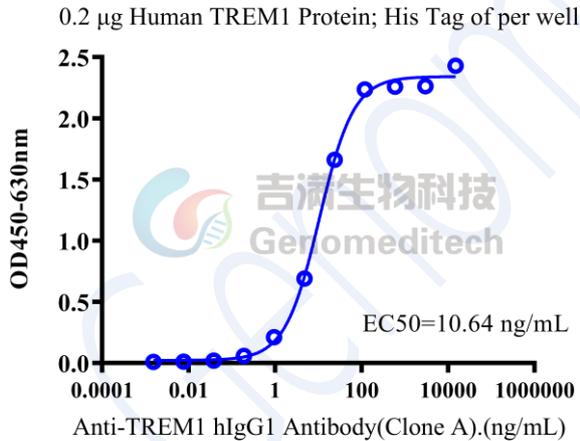
Human TREM1 Protein; His Tag (Catalog # GM-88422RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-TREM1 mIgG1 Antibody(PY159) (Catalog # GM-88439AB) were added.

**Bioactivity-ELISA**



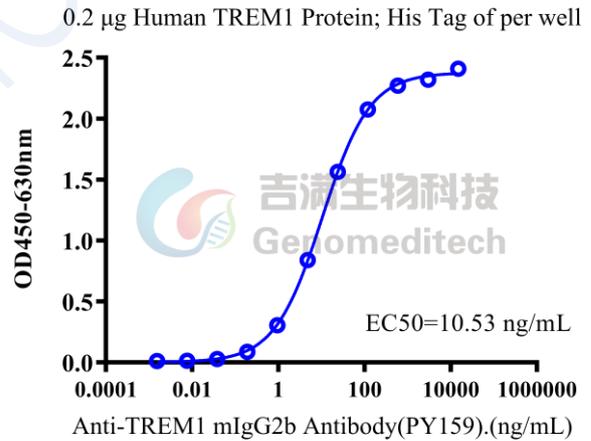
Human TREM1 Protein; His Tag (Catalog # GM-88422RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-TREM1 mIgG2a Antibody(PY159) (Catalog # GM-88440AB) were added.

**Bioactivity-ELISA**



Human TREM1 Protein; His Tag (Catalog # GM-88422RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-TREM1 hIgG1 Antibody(Clone A) (Catalog # GM-88441AB) were added.

**Bioactivity-ELISA**



Human TREM1 Protein; His Tag (Catalog # GM-88422RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-TREM1 mIgG2b Antibody(PY159) (Catalog # GM-88442AB) were added.