

# Recombinant Mouse TREM2 Protein

Catalog No.: RP01558 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Mouse	83433	Q99NH8-1

### Tags

C-His

### Synonyms

TREM-2; Trem2a; Trem2b; Trem2c; TREM2

## Product Information

Source	Purification
HEK293 cells	> 90% by SDS-PAGE.

Calculated MW	Observed MW
17.65 kDa	25-40 kDa

### Endotoxin

Please contact us for more information.

### Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

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## Background

Triggering Receptor Expressed on Myeloid cells 2 (TREM2) is a 35 kDa type I transmembrane member of the TREM family and Ig superfamily. Mature human TREM2 consists of a 156 amino acid (aa) extracellular domain (ECD) with one V-type Ig-like domain, a 21 aa transmembrane (TM) domain, and a 35 aa cytoplasmic tail. Soluble forms of the TREM2 ECD are generated by alternative splicing or proteolytic cleavage, and the cytoplasmic domain can be liberated by gamma-Secretase mediated intramembrane cleavage. A positively charged lysine within the transmembrane segment allows association with the signal adapter protein, DAP12 and inhibition of macrophage activation. TREM2 is expressed on macrophages, immature myeloid dendritic cells, osteoclasts, microglia, and adipocytes. It promotes the differentiation and function of osteoclasts, the production of inflammatory cytokines by adipocytes, insulin resistance, and the phagocytic clearance of bacteria.

## Basic Information

### Description

Recombinant Mouse TREM2 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu19-Ser171) of mouse TREM-2 (Accession #NP\_112544.1) fused with a 6×His tag at the C-terminus.

### Bio-Activity

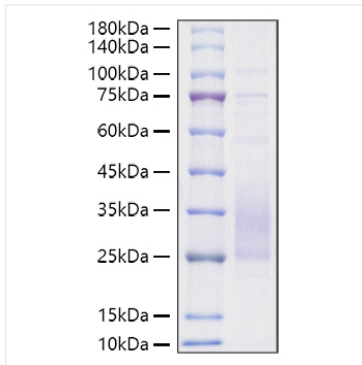
Measured by its binding ability in a functional ELISA. Immobilized Mouse TREM-2 Protein at 1 µg/mL (100 µL/well) can bind TREM-2 Rabbit pAb with a linear range of 0.06-11.7 ng/mL.

### Storage

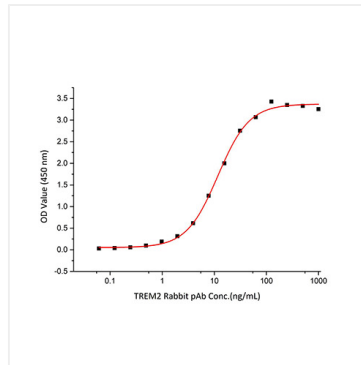
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

## Validation Data

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Recombinant Mouse TREM-2 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 25-40 kDa.



Immobilized Mouse TREM-2 Protein at 1  $\mu\text{g/mL}$  (100  $\mu\text{L}$ /well) can bind TREM-2 Rabbit pAb with a linear range of 0.06-11.7 ng/mL