

## Recombinant Mouse TREM2 Protein (Fc Tag)

**Catalog No.** PKSM041175

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

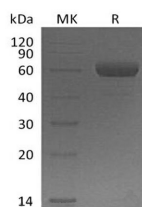
### Description

<b>Synonyms</b>	Triggering Receptor Expressed on Myeloid Cells 2b; Triggering receptor expressed on myeloid cells 2; TREM-2; Triggering receptor expressed on monocytes 2; Trem2; Trem2a; Trem2b; Trem2c; TREM-2b
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Leu19-Pro168
<b>Accession</b>	Q99NH8
<b>Calculated Molecular Weight</b>	43.7 kDa
<b>Observed molecular weight</b>	55-70 kDa
<b>Tag</b>	C-Fc
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

Triggering receptor expressed on myeloid cells-2 (TREM-2) is a cell surface receptor primarily expressed on macrophages, osteoclasts, microglia and dendritic cells. TREM-2 is one member of the TREM family, inhibiting the releasing of inflammatory mediators, so it is an important in vivo anti-inflammatory receptor. TREM-2 consists of an 18 aa signal sequence, a 153 aa extracellular domain (ECD) with one V-type Ig-like domain, a 21 aa transmembrane (TM) domain, and a 35 aa cytoplasmic tail. A soluble form of TREM-2 (TREM-2b) created by alternate splicing diverges at aa 161. TREM-2 transduces intracellular signals through the adaptor DAP12. After binding of TREM-2 with ligand, the TREM-2/DAP12 (dead-cell-activated-receptor-associated protein)-mediated signal transduction pathway causes a series of intracellular protein tyrosine phosphorylation reactions and enzymatic reactions, which then activate the myeloid cells and participate T cell responses.