Recombinant Protein Technical Manual

Recombinant Mouse TREM2 Protein (His Tag)

RPES3550

Product Data:

Product SKU: RPES3550

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q99NH8

Protein Information:

Molecular Mass: 17.3 kDa

AP Molecular Mass: 25-40 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 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

Immunogen Information:

Sequence: Leu19-Pro168

Background:

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.