



Recombinant Protein Technical Manual

Recombinant Human TREM2 Protein (His Tag)

RPES1370

Product Data:

Product SKU: RPES1370

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q9NZC2

Protein Information:

Molecular Mass: 18.3 kDa

AP Molecular Mass: 28 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % as determined by reducing 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°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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 2; TREM-2; Triggering receptor expressed on monocytes 2; TREM2; Trem2a; Trem2b; Trem2c

Immunogen Information:

Sequence: His19-Ser174

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.