



Recombinant Protein Technical Manual

Recombinant Mouse RANK/TNFRSF11A Protein (His Tag)

RPES2691

Product Data:

Product SKU: RPES2691

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: O35305

Protein Information:

Molecular Mass: 21.3 kDa

AP Molecular Mass: 26-30 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°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: Receptor activator of NF-KB; tumor necrosis factor receptor superfamily member 11A; TRANCE receptor; Osteoclast differentiation factor receptor;NFKB activator; TRANCER; CD265; TNFRSF11A; TRANCE R; CD265 antigen; ODFR

Immunogen Information:

Sequence: Val31-Ser214

Background:

Receptor activator of NF- κ B (RANK, TNFRSF11A) belongs to one member of tumor necrosis factor receptor family. It is a receptor for TNFSF11/RANKL/TRANCE/OPGL. This gene encodes a type 1 membrane protein with a 30 amino acids (aa) signal peptide, 184 aa extracellular region, a 20 aa transmembrane domain and a 391 aa cytoplasmic region. Human and murine RANK share 81% aa identity in their extracellular domains. RANK is ubiquitous highly expressed in trabecular bone, thymus, small intestine, lung, brain and kidney, but weakly expressed in spleen and bone marrow. After binding its ligand RANKL, RANK can activate signaling pathways such as NF- κ B, JNK, ERK, p38, and Akt/PKB, through TRAF protein phosphorylation. RANK/TNFRSF11A signaling is largely considered to be growth promoting and apoptosis reducing such as the effects observed in osteoclasts. RANK/TNFRSF11A was also found to be involved in the regulation of interactions between T-cells and dendritic cells.