



Recombinant Protein Technical Manual

**Recombinant Mouse RANKL/TNFSF11 Protein
(Active)**
RPES3387

Product Data:

Product SKU: RPES3387

Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: O35235

Protein Information:

Molecular Mass: 20.1 kDa

AP Molecular Mass: 18 kDa

Tag:

Bio-activity: Measured by its ability to induce osteoclast differentiation of RAW 264.7 mouse monocyte/macrophage cells. The ED50 for this effect is 0.2 ng/ml.

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 20mMTris,150mMNaCl,1mMEDTA,pH8.0.

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

Application:

Synonyms: Tumor necrosis factor ligand superfamily member 11;Tnfsf11;Osteoclast differentiation factor;ODF;Osteoprotegerin ligand;OPGL;Receptor activator of nuclear factor kappa-B ligand;RANKL;TNF-related activation-induced cytokine;TRANCE;CD254

Immunogen Information:

Sequence: Gln137-Asp316

Background:

Mouse tumor necrosis factor ligand superfamily member 11 (Tnfsf11) is a member of the tumor necrosis factor (TNF) cytokine family. Tnfsf11 is widely expressed in cells including T cells and T cell rich organs, such as thymus and lymph nodes. This cytokine can bind to TNFRSF11B/OPG and TNFRSF11A/RANK. Tnfsf11 is involved in a number of fundamental biological processes such as acting as regulator of interactions between T-cells and dendritic cells, the regulation of the T-cell-dependent immune response and enhancing bone-resorption in humoral hypercalcemia of malignancy. It augments the ability of dendritic cells to stimulate naive T-cell proliferation.