

Product datasheet for **TP723756**

Tnfsf11 (NM_011613) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse tumor necrosis factor (ligand) superfamily, member 11 (Tnfsf11 / RANKL / Trance)
Species:	Mouse
Expression Host:	Sf9
Expression cDNA Clone or AA Sequence:	Mouse TRANCE, the region of Lis158-Asp316, from gene Accession# NM_011613.3
Tag:	N-His
Predicted MW:	20 kDa
Concentration:	lot specific
Purity:	>95%, as determined by Coomassie stained SDS-PAGE.
Buffer:	1 x PBS
Bioactivity:	Bioactivity was measured by its property to induce osteoclast differentiation in RAW264.7 cells in the absence of any cross-linking. The bioactivity is equivalent to competitor cytokines.
Endotoxin:	Less than 0.01 ng per µg protein as determined by the LAL method
Storage:	Upon receipt, store the product at -20°C or -80°C.
Stability:	Unopened vial can be stored between 2°C and 8°C for up to 2 weeks, at -20°C for up to 6 months, or at -70°C or below until the expiration date. Aliquots can be stored between 2°C and 8°C for up to one week and stored at -20°C or colder for up to 3 months. Avoid repeated freeze/thaw cycles.
RefSeq:	NP_035743
Locus ID:	21943
UniProt ID:	O35235
RefSeq Size:	2243
Cytogenetics:	14 41.26 cM
RefSeq ORF:	951
Synonyms:	Ly109I; ODF; OPGL; RANKL; Trance



[View online »](#)

Summary:

Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and activation factor. Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy (By similarity). Induces osteoclastogenesis by activating multiple signaling pathways in osteoclast precursor cells, chief among which is induction of long lasting oscillations in the intracellular concentration of Ca (2+) resulting in the activation of NFATC1, which translocates to the nucleus and induces osteoclast-specific gene transcription to allow differentiation of osteoclasts (PubMed:24039232). During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation (PubMed:23395171, PubMed:26644563).[UniProtKB/Swiss-Prot Function]

Product images: