Recombinant Mouse Tnfsf11, His-tagged

Cat. No. Tnfsf11-190M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Tnfsf11 encoding the extracellular domain of mouse TRANCE was fused to the signal peptide of CD33 and six his residues at the amino-terminus. The chimeric protein was inserted into a suitable expression vector and expressed in*NSO cells*.
Species	Mouse
Source	Mammalian Cells
Description	RANKL (Receptor Activator for Nuclear Factor κ B Ligand), also known as TNF-related activation-induced cytokine (TRANCE), osteoprotegerin ligand (OPGL), and ODF (osteoclast differentiation factor), is a member of the tumor necrosis factor family cytokine. RANKL is essential for osteoclast formation, activation, and survival. RANKL through interaction with its receptor RANK can modulate matrix degradation and inflammation. RANKL and RANK have essential roles in lymph node formation, establishment of the thymic microenvironment, and development of a lactating mammary gland during pregnancy. Consequently, novel drugs specifically targeting RANK, RANKL, and their signaling pathways in osteoclasts are expected to revolutionize the treatment of various ailments associated with bone loss, such as arthritis, periodontal disease, cancer metastases, and osteoporosis.
Molecular Weight	The predicted molecular weight of Recombinant Mouse RANKL is Mr 28 kDa. However, the actual molecular weight as observed by migration on SDS Page is Mr 36 kDa.

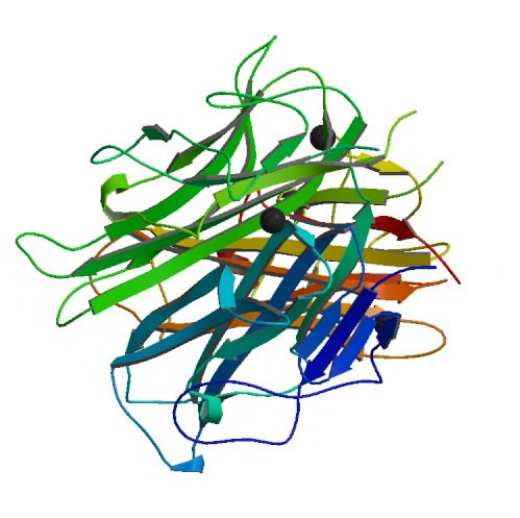
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

State Of Matter	Solution.
Purity	>95% by SDS Page and analyzed by silver stain.
Formulation	The recombinant protein is 0.2 μm filtered and provided as a solution in solution in PBS, pH 7.4.
Endotoxin	<1.0 EU/μg as determined by the LAL method.
Biological Activity	The biological activity of Mouse RANKL was determined by its ability to induce osteoclast differentiation on mouse splenocytes. The expected ED_{50} for this effect is typically 5-15 ng/ml in the presence of 2.5 μg/ml of a cross-linking antibody Anti-PolyHistidine.
Storage And Stability	This recombinant protein solution is stable for up to twelve months when stored at -20°C to -70°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles. See Product Insert for exact lot specific storage instructions. Upon thawing, this protein, in the presence of a carrier protein, it can be stored at 2°C-8°C for one month without detectable loss of activity. For long-term storage, aliquot and freeze at -20°C to -70°C in a manual defrost freezer. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	Tnfsf11 tumor necrosis factor (ligand) superfamily, member 11 [Mus musculus]
Synonyms	Tnfsf11; tumor necrosis factor (ligand) superfamily, member 11; ODF; OPG; OPGL; RANKL; Ly109l; Trance; OPG ligand; osteoprotegerin ligand; osteoclast differentiation factor; receptor activator of NF-kappaB ligand; tumor necrosis factor-related activation-induced cytokine; Ly109l
Gene ID	21943

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_011613
Protein Refseq	NP_035743
UniProt ID	O35235
Chromosome Location	14 D3; 14 45.0 cM
Pathway	Cytokine-cytokine receptor interaction
Function	cytokine activity; protein binding; receptor activity; tumor necrosis factor receptor binding
PDB rendering based on 1s55.	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA