Recombinant mouse TRANCE/RANKL/TNFSF11 protein

Catalog Number: ATGP3915

PRODUCT INFORMATION

Expression system
E.coli

Domain
158-316aa

UniProt No.
O35235

NCBI Accession No.
NP_035743

Alternative Names
Tumor necrosis factor ligand superfamily member 11, Osteoclast differentiation factor, ODF, Osteoprotegerin ligand, OPGL, Receptor activator of nuclear factor kappa-B ligand, RANKL, TNF-related activation-induced cytokine, TRANCE, CD254

PRODUCT SPECIFICATION

Molecular Weight
17.9 kDa (160aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid In. 20mM Tris-HCl buffer (pH8.5) containing 0.1M NaCl

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Measured in a osteoclast differentiation assay using RAW 264.7 mouse monocyte/macrophage cells. The ED50 range ≤2ng/ml.

Tag
Non-Tagged

Application
SDS-PAGE, Bioactivity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

Tnfsf11, also known as tumor necrosis factor ligand superfamily member 11, is a member of the tumor necrosis factor (TNF) cytokine family which is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. Tnfsf11 also has a function in the immune system, where it is expressed by T helper cells and is thought to be involved in dendritic cell maturation. Tnfsf11 is important in bone metabolism. This natural and necessary surface-bound molecule (also known as CD254) found on osteoblasts serves to activate osteoclasts, which are the cells involved in bone resorption. Recombinant Mouse Tnfsf11 protein was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

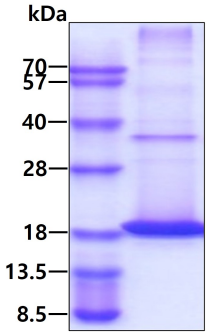
MKPEAQPFAH LTINAASIPS GSHKVTLSSW YHDRGWAKIS NMTLSNGKLR VNQDGFYYLY ANICFRHHET SGSVPTDYLQ LMVYVVKTSI KIPSSHNLMK GGSTKNWSGN SEFHFYSINV GGFFKLRAGE EISIQVSNPS LLDPDQDATY FGAFKVQDID

General References

Lam J., et al. (2001). J. Clin. Invest. 108(7):971-9.
Ito S., et al. (2002). J. Biol. Chem. 277(8):6631-6.

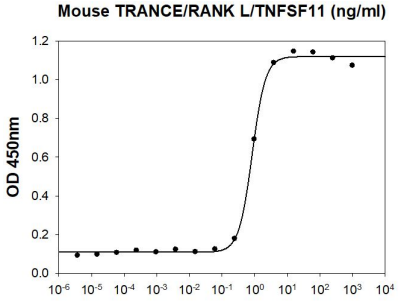
DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity



Mouse TRANCE/RANK L/TNFSF11 stimulates osteoclast differentiation of the RAW 264.7 mouse monocyte/macrophage cells. The ED50 range ≤2 ng/ml.