

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 ≤ 2 ng/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

MKPEAQPF~~FAH~~ LTINAASIPS GSHKVTLLSSW YHDRGWAKIS NMTLSNGKLR VNQDGFYYLY ANICFRHHET SGSVPTDYLQ
LMVYVVKTSI KIPSSHNLMK GGSTKNWSGN SEHFHYSINV GGFFKLRAGE EISIQVSNPS LLDPDQDATY FGAFKVQDID

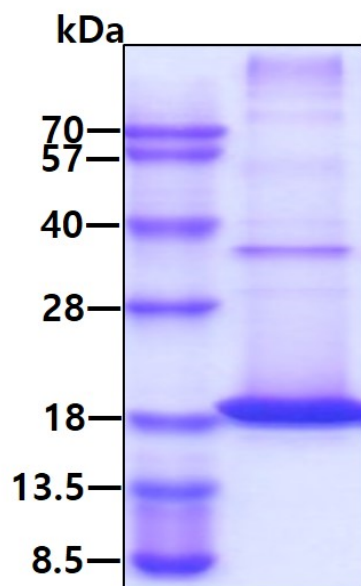
General References

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

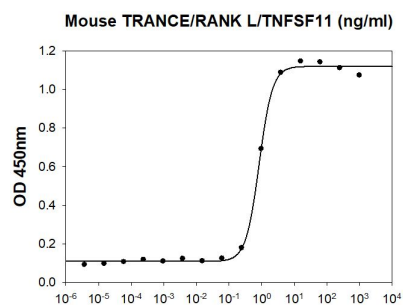


3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity

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