

# Recombinant human TRANCE/RANK L/TNFSF11 protein

Catalog Number: ATGP1093

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

140-317aa

### UniProt No.

O14788

### NCBI Accession No.

NP\_003692

### 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

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### Molecular Weight

22.3 kDa (199aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl, 1mM DTT

### Purity

> 80% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### 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.

## BACKGROUND

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### Description

TNFSF11, also known as RANKL, 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

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(also known as CD254) found on osteoblasts serves to activate osteoclasts, which are the cells involved in bone resorption. Recombinant human TNFSF11 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

## Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MIRA EKAMVD GSWLDLAKRS KLEAQPF AHL TINATDIPSG SHKVSLSSWY HDRGWAKISN  
MTFSNGKLIV NQDGFYYLYA NICFRHHETS GDLATEYLQL MVYVTKTSIK IPSSHTLMKG GSTKYWSGNS EFHFYSINVG  
GFFKLRS GEE ISIEVSNPSL LDPDQDATYF GAFKVRDID

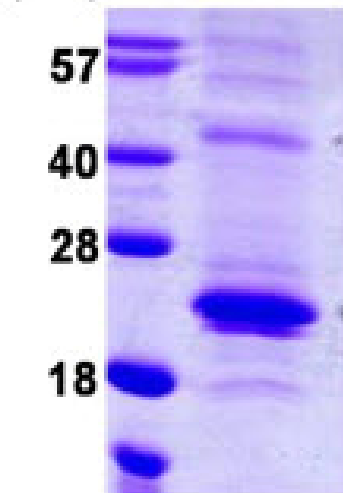
## General References

Lam J., et al. (2001) J. Clin. Invest. 108:971-979  
Ito S., et al. (2002) J. Biol. Chem. 277:6631-6636

## DATA

### SDS-PAGE

(kDa)



15% SDS-PAGE (3ug)

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