

# Recombinant mouse RANK/TNFRSF11A protein

Catalog Number: ATGP4155

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

31-214aa

### UniProt No.

O35305

### NCBI Accession No.

NP\_033425.3

### Alternative Names

TNF receptor superfamily member 11a, Tumor necrosis factor receptor superfamily member 11A, Osteoclast differentiation factor receptor, Receptor activator of NF- $\kappa$ B, Familial expansile osteolysis, TRANCE receptor, RANK, CD265, FEO, ODFR, TRANCE-R, TNR11

## PRODUCT SPECIFICATION

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### Molecular Weight

47.5 kDa (426aa)

### Concentration

1mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1 $\mu$ g of protein (determined by LAL method)

### Biological Activity

Measured by its binding ability in a functional ELISA with Mouse RANKL/TNFSF11 (CAT# ATGP3915). The ED50 range  $\leq$  200 ng/ml.

### Tag

hIgG-His-Tag

### 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

RANK, as known as Tumor necrosis factor receptor superfamily member 11A (TNFRSF11A) is a member of the tumor necrosis factor receptor (TNFR) molecular sub-family. It is the receptor for RANK-Ligand (RANKL) and part of the RANK/RANKL/OPG signaling pathway that regulates osteoclast differentiation and activation. It is associated with bone remodeling and repair, activation of NF-kappa B and c-jun N-terminal kinase, enhancement of T cell growth and dendritic cell function, immune cell function, lymph node development, thermal regulation, and mammary gland development. It is able to block TRANCE induced biological activity. Recombinant mouse RANK, fused to hlgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

### Amino acid Sequence

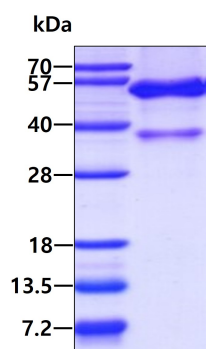
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<ADL>VTPPCTQ ERHYEHLGRC CSRCEPGKYL SSKCTPTS DSVCLPCGPDEY LDTWNEEDKC LLHKVCDAGK
ALVAVDPGNH TAPRRCACTA GYHWNSDCEC CRRNTECAPG FGAQHPLQLN KDTVCTPCLL GFFSDVFSST DKCKPWTNCT
LLGKLEAHQG TTESDVVCS SMTLRRPPE AQAYLPS<LEP KSCDKTHTCP PCPAPELLGG PSVFLFPPKP KDTLMISRTP
EVTCVVVDVS HEDPEVKFNW YVDGVEVHNA KTKPREEQYN STYRVVSVLT VLHQDWLNGK EYKCKVSNKA LPAPIEKTIS
KAKGQPREPQ VYTLPPSRDE LTKNQVSLT LVKGFYPSDI AVEWESNGQP ENNYKTTTPV LDSDGSFPLY SKLTVDKSRW
QQGNVFCSSV MHEALHNHYT QKSLSLSPGK HHHHHH>
```

### General References

- Anderson, D.M. et al. (1997) Nature 390, 175-179.
- Nakagawa, N. et al. (1998) Biochem. Biophys. Res. Commun. 245:395-400.
- Bharat B. Aggarwal. (2003) Nature 3, 745-756.

## DATA

### SDS-PAGE



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

### Biological Activity

# Recombinant mouse RANK/TNFRSF11A protein

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Mouse RANKL/TNFSF11 (CAT# ATGP3915) is coated at 1 ug/ml (100 ul/well) can bind Mouse RANK/TNFRSF11A. The ED50 range  $\leq$  200 ng/ml.

