

TRANCE/RANK L/TNFSF11

Catalog Number: ATGP4157

PRODUCT INFORMATION

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

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

> 85% by SDS - PAGE

Endotoxin level

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

Tag

His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles

BACKGROUND

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

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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 human TNFSF11 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography.

Amino acid Sequence

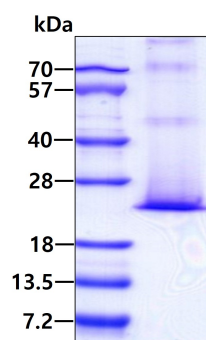
MGSSHHHHHH SGLVPRGSH MIRA EKAMVD GSWLDLAKRS KLEAQPFAHL TINATDIPSG SHKVSLSSWY HDRGWAKISN
MTFSNGKLIV NQDGFYYLYA NICFRHHETS GDLATEYLQL MVYVTKTSIK IPSSHTLMKG GSTKYWSGNS EFHFYSINVG
GFFKLRSGEE ISIEVSNPSL LDPDQDATYF GAFKVRDID

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



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