

# Datasheet for ABIN7505406 **RANKL Protein (AA 22-197) (His tag)**



#### Overview

Quantity:	100 μg
Target:	RANKL (TNFSF11)
Protein Characteristics:	AA 22-197
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RANKL protein is labelled with His tag.

## **Product Details**

Sequence:	Glu 22-Ile 197
Characteristics:	A DNA sequence encoding the Mouse OPG/Tnfrsf11b protein (008712) (Glu 22-Ile 197) was expressed with a N-His tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.

## **Target Details**

Target:	RANKL (TNFSF11)
Alternative Name:	OPG (TNFSF11 Products)
Background:	Abbreviation: OPG,Tnfrsf11b
	Target Synonym: Tumor necrosis factor receptor superfamily member 11B,Osteoclastogenesis
	inhibitory factor,Osteoprotegerin,Tnfrsf11b,Ocif,Opg,TR1
	Background: Osteoprotegerin or TNFRSF11B is a member of the TNF-receptor superfamily.

This protein is an osteoblast-secreted decoy receptor that functions as a negative regulator of bone resorption. This protein specifically binds to its ligand, osteoprotegerin ligand, both of which are key extracellular regulators of osteoclast development. Studies of the mouse counterpart also suggest that this protein and its ligand play a role in lymph-node organogenesis and vascular calcification. Alternatively spliced transcript variants of this gene have been reported, but their full length nature has not been determined.

Osteoprotegerin/TNFRSF11B acts as decoy receptor for RANKL and thereby neutralizes its function in osteoclastogenesis. This protein may inhibit the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local RANKL/OPG ratio. Osteoprotegerin/TNFRSF11B also play a role in preventing arterial calcification, act as decoy receptor for TRAIL and protect against apoptosis. TRAIL binding blocks the inhibition of osteoclastogenesis.

Molecular Weight:

Calculated MW: 19.25 kDa

Observed MW: 25 kDa

UniProt:

008712

Pathways:

NF-kappaB Signaling

## **Application Details**

Restrictions:

For Research Use only

## Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4.  Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.  Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Expiry Date:	12 months