

# Datasheet for ABIN6386415

# RANKL Protein (AA 64-245) (AVI tag,Fc Tag,Biotin)





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Quantity:	200 μg
Target:	RANKL (TNFSF11)
Protein Characteristics:	AA 64-245
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This RANKL protein is labelled with AVI tag,Fc Tag,Biotin.
Product Details	
Sequence:	AA 64-245
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per μg by the LAL method.
Target Details	
Target Details  Target:	RANKL (TNFSF11)
	RANKL (TNFSF11) TNFSF11 (TNFSF11 Products)
Target:	

factor ligand superfamily member 11 (TNFSF11), TNF-related activation-induced cytokine (TRANCE), osteoprotegerin ligand (OPGL), and osteoclast differentiation factor (ODF), is known as a type II membrane protein and is a member of the tumor necrosis factor (TNF) superfamily. RANKL, through its ability to stimulate osteoclast formation and activity, is a critical mediator of bone resorption and overall bone density. Some findings also suggestion some cancer cells, particularly prostate cancer cells, can activate an increase in bone remodeling and ultimately increase overall bone production.[17] This increase in bone remodeling and bone production increases the overall growth of bone metastasizes. The overall control of bone remodeling is regulated by the binding of RANKL with its receptor or its decoy receptor, respectively, RANK and OPG.

Molecular Weight:

49.2 kDa

Pathways:

NF-kappaB Signaling

### **Application Details**

Comment:

Ready-to-use AvitagTM biotinylated protein:

The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

Restrictions:

For Research Use only

#### Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

3.0

2.5

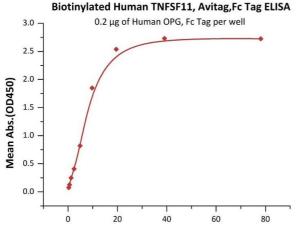
2.0

1.5

0.5

0.0

Mean Abs. (0D450)



## Biotinylated Human TNFSF11, Avitag,Fc Tag Conc. (ng/mL)

kDa	M R
116.0	_
66.2	
45.0	_
35.0	-
25.0	_
18.4	***
14.4	_

Biotinylated Human TNFSF11, Avitag,Fc Tag ELISA

 $0.05~\mu g$  of Human RANK, Mouse IgG2a Fc Tag, low endotoxin per well

Biotinylated Human TNFSF11, Avitag,Fc Tag Conc. (ng/mL)

20

#### **ELISA**

**Image 1.** Immobilized Human OPG, Fc Tag (ABIN2181850,ABIN2181849) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human TNFSF11, Avitag,Fc Tag (ABIN6386415,ABIN6388268) with a linear range of 0.3-10 ng/mL (Routinely tested).

#### **SDS-PAGE**

**Image 2.** Biotinylated Human TNFSF11, Avitag,Fc Tag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 %.

#### **ELISA**

**Image 3.** Immobilized Human RANK, Mouse IgG2a Fc Tag, low endotoxin (ABIN5954944,ABIN6253593) at  $0.5~\mu g/mL$  (100  $~\mu L/well$ ) can bind Biotinylated Human TNFSF11, Avitag,Fc Tag (ABIN6386415,ABIN6388268) with a linear range of 0.4-13 ng/mL (QC tested).