

For Research Use Only

# TNFSF11/RANKL Monoclonal antibody

Catalog Number: 66610-1-Ig

Featured Product

11 Publications



## Basic Information

Catalog Number:

66610-1-Ig

Size:

150ul, Concentration: 2200 ug/ml by 8600 Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG19975

GenBank Accession Number:

BC074890

GeneID (NCBI):

8600

UNIPROT ID:

O14788

Full Name:

tumor necrosis factor (ligand) superfamily, member 11

Calculated MW:

317 aa, 35 kDa

Observed MW:

35-38 kDa

Purification Method:

Protein G purification

CloneNo.:

3F2E1

Recommended Dilutions:

WB: 1:2000-1:10000

IF/ICC: 1:400-1:1600

## Applications

Tested Applications:

WB, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

WB: COLO 320 cells, HeLa cells, U2OS cells, HUVEC cells, NCCIT cells, human spleen tissue, DC2.4 cells, JAR cells, RAW 264.7 cells

IF/ICC: MCF-7 cells,

## Background Information

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. RANKL is a polypeptide of 217 amino acids that exerts its biological activity both in a transmembrane form of about 40-45 kDa and in soluble one of 31 kDa (PMID: 15308315). The membrane-bound RANKL (mRANKL) is cleaved into a sRANKL by the metalloprotease-disintegrin TNF-alpha convertase (TACE) or a related metalloprotease (MP). RANKL induces osteoclast formation through its receptor, RANK, which transduces signals by recruiting adaptor molecules, such as the TNF receptor-associated factor (TRAF) family of proteins. RANKL was shown to be a dendritic cell survival factor and is involved in the regulation of T cell-dependent immune response. T cell activation was reported to induce expression of this gene and lead to an increase of osteoclastogenesis and bone loss. RANKL was shown to activate antiapoptotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis factor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regulation of cell apoptosis.

## Notable Publications

| Author          | Pubmed ID | Journal           | Application |
|-----------------|-----------|-------------------|-------------|
| Qian Liang      | 33795653  | Cell Death Dis    | WB,IF       |
| Zeshan Zulfiqar | 40036933  | Poult Sci         | WB          |
| Ana Crastin     | 39713898  | Adv Healthc Mater | IF          |

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

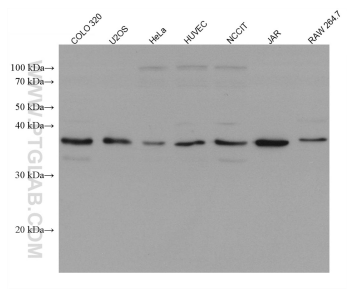
For technical support and original validation data for this product please contact:

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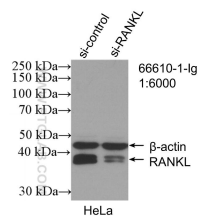
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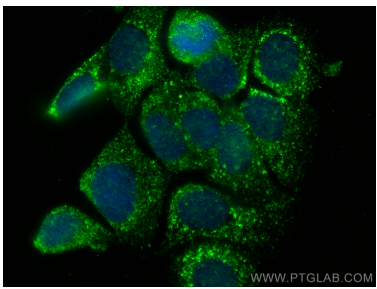
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66610-1-Ig (RANKL antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



WB result of RANKL antibody (66610-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-RANKL transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using RANKL antibody (66610-1-Ig, Clone: 3F2E1 ) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).