

For Research Use Only

# TNFSF11/RANKL Polyclonal antibody

Catalog Number: 23408-1-AP

71 Publications



## Basic Information

### Catalog Number:

23408-1-AP

### Size:

150ul, Concentration: 550 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### 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:

20-30 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:1000

IHC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human

### Cited Species:

human, mouse, rat

### Positive Controls:

WB: Raji cells,

IHC: human stomach cancer tissue, human colon tissue, human heart tissue

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## 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
Yi Yu	34585393	J Periodontol	WB
Yuan-Wei Zhang	36196151	J Orthop Translat	IHC
Xiaohui Zhao	32980481	J Ethnopharmacol	WB

## 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

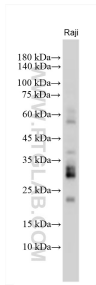
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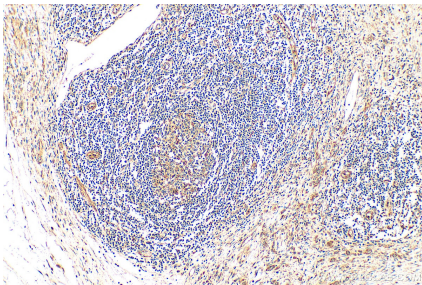
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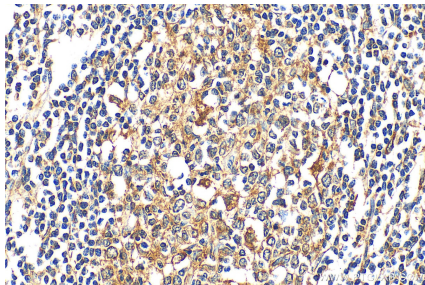
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 23408-1-AP (RANKL antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 23408-1-AP (RANKL antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 23408-1-AP (RANKL antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).