

Anti-RANK Picoband Antibody

Catalog # ABO10145

Product Information

Application	WB, IHC-P
Primary Accession	Q9Y6Q6
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Tumor necrosis factor receptor superfamily member 11A(TNFRSF11A) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	8792
Other Names	Tumor necrosis factor receptor superfamily member 11A, Osteoclast differentiation factor receptor, ODFR, Receptor activator of NF-KB, CD265, TNFRSF11A, RANK
Calculated MW	66034
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Isoform 1: Cell membrane ; Single-pass type I membrane protein .
Tissue Specificity	Ubiquitous expression with high levels in skeletal muscle, thymus, liver, colon, small intestine and adrenal gland.
Source	Eukaryota
Protein Name	Tumor necrosis factor receptor superfamily member 11A
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human RANK (235-262aa YRKKGKALTANLWHWINEACGRLSGDKE), different from the related mouse sequence by seven amino acids.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	TNFRSF11A
Synonyms	RANK
Function	Receptor for TNFSF11/RANKL/TRANCE/OPGL; essential for RANKL- mediated osteoclastogenesis (PubMed: 9878548). Its interaction with EEIG1 promotes osteoclastogenesis via facilitating the transcription of NFATC1 and activation of PLCG2 (By similarity). Involved in the regulation of interactions between T-cells and dendritic cells (By similarity).
Cellular Location	[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Membrane raft {ECO:0000250 UniProtKB:O35305}. Note=Following TNFSF11/RANKL stimulation, recruited to lipid rafts along with STAC2 {ECO:0000250 UniProtKB:O35305}
Tissue Location	Ubiquitous expression with high levels in skeletal muscle, thymus, liver, colon, small intestine and adrenal gland

Background

Receptor Activator of Nuclear Factor κ B (RANK), also known as TRANCE Receptor, is a type I membrane protein that is expressed on the surface of osteoclasts and is involved in their activation upon ligand binding. RANK is also expressed on dendritic cells and facilitates immune signaling. It is found on the surface of stromal cells, osteoblasts, and T cells. By analysis of somatic cell and radiation hybrid panels, this gene is mapped to 18q22.1.

Images

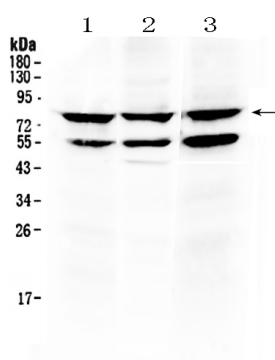


Figure 1. Western blot analysis of RANK using anti- RANK antibody (ABO10145). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat thymus tissue lysates, Lane 2: mouse thymus tissue lysates, Lane 3: HEPG2 whole Cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- RANK antigen affinity purified polyclonal antibody (Catalog # ABO10145) at 0.5 μ g/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for RANK at approximately 80KD. The expected band size for RANK is

at 66KD.

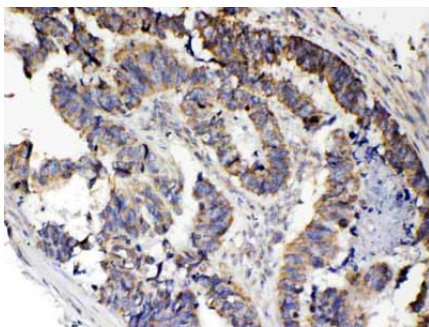


Figure 2. IHC analysis of RANK using anti- RANK antibody (ABO10145).RANK was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- RANK Antibody (ABO10145) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

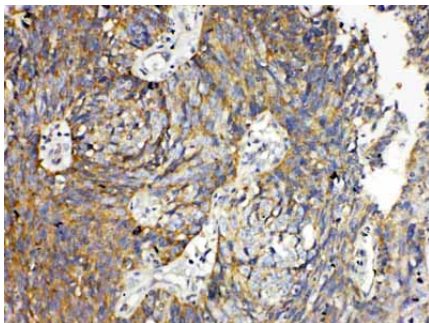


Figure 3. IHC analysis of RANK using anti- RANK antibody (ABO10145).RANK was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- RANK Antibody (ABO10145) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.