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Anti-RANKL/TNFSF11 Antibody Picoband®

Catalog Number: PB10015

About Tnfsf11

Receptor activator of nuclear factor kappa-B ligand (RANKL), also known as tumor necrosis factor ligand superfamily member 11 (TNFSF11), is a protein that in humans is encoded by the TNFSF11 gene. This gene encodes 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. It is mapped to chromosome13q14.11. Targeted disruption of the related gene in mice led to severe osteopetrosis and a lack of osteoclasts. The deficient mice exhibited defects in early differentiation of T and B lymphocytes, and failed to form lobulo-alveolar mammary structures during pregnancy. This gene may play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy.

Overview

Product Name	Anti-RANKL/TNFSF11 Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-RANKL/TNFSF11 Antibody Picoband® catalog # PB10015. Tested in ELISA, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na2HPO4, and 0.05 mg NaN3. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9ESE2

Technical Details

Immunogen	E. coli-derived rat RANKL recombinant protein (Position: F141-D318). Rat RANKL shares 87.9% and 96.6% amino acid (aa) sequence identity with human and mouse RANKL, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

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	blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	ELISA, 0.1-0.5ug/ml, -, Rat Western blot, 0.1-0.5ug/ml, Rat

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Anti-RANKL/TNFSF11 Antibody Picoband® (PB10015) Images

Western blot analysis of RANKL using anti-RANKL antibody (PB10015). 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 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-RANKL antigen affinity purified polyclonal antibody (Catalog # PB10015) at 0.5 ug/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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for RANKL at approximately 40 kDa. The expected band size for RANKL is at 35 kDa.

2 Publications Citing This Product

1. PubMed ID: 33251612, Hu Y,Hao X,Liu C,Ren C,Wang S,Yan G,Meng Y,Mishina Y,Shi C,Sun H.Acvr1 deletion in osteoblasts impaired mandibular bone mass through compromised osteoblast differentiation and enhanced sRANKL-induced osteoclastogenesis. J Cell Physiol.2020 Nov 29.doi:10.1

2. PubMed ID: 25891179, Effectiveness of combined salmon calcitonin and aspirin therapy for osteoporosis in ovariectomized rats

Visit bosterbio.com/anti-rankl-picoband-trade-antibody-pb10015-boster.html to see all 2 publications.

Anti-RANKL/TNFSF11 Antibody

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