

Product datasheet

Anti-RANKL antibody ab9957

★★★★☆ [4 Abreviews](#) [62 References](#) [2 Images](#)

Overview

Product name	Anti-RANKL antibody
Description	Rabbit polyclonal to RANKL
Host species	Rabbit
Tested applications	Suitable for: Sandwich ELISA, ICC/IF, IHC-P, WB, ELISA
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Recombinant full length protein corresponding to Human RANKL aa 100-350. Database link: O14788

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes

Although some customers have been successful in IHC we no longer batch test in this application.

We have received both positive and negative customer feedback on mouse reactivity for this antibody. Therefore, we do not guarantee this species.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Lyophilized:Reconstitute with 200µl of sterile water. Please note that if you receive this product in liquid form it has already been reconstituted as described and no further reconstitution is necessary.
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
Storage buffer	No preservative, sterile filtered
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab9957 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration. To detect hsRANKL by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with ab83145 as a detection antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant hsRANKL.
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 37 kDa (predicted molecular weight: 35 kDa). To detect hsRANK-L by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hsRANK-L is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.
ELISA	★★★★★ (1)	Use at an assay dependent concentration. To detect hsRANK-L by direct ELISA (using 100µl/well antibody solution) a concentration of at least 0.5µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of 0.2 - 0.4 ng/well of recombinant hsRANK-L.

Target

Function

Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and activation factor. Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy.

Tissue specificity

Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.

Involvement in disease

Defects in TNFSF11 are the cause of osteopetrosis autosomal recessive type 2 (OPTB2) [MIM:259710]; also known as osteoclast-poor osteopetrosis. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. The disorder occurs in two forms: a severe autosomal recessive form occurring in utero, infancy, or childhood, and a benign autosomal dominant form occurring in adolescence or adulthood. Autosomal recessive osteopetrosis is usually associated with normal or elevated amount of non-functional osteoclasts. OPTB2 is characterized by paucity of osteoclasts, suggesting a molecular defect in osteoclast development.

Sequence similarities

Belongs to the tumor necrosis factor family.

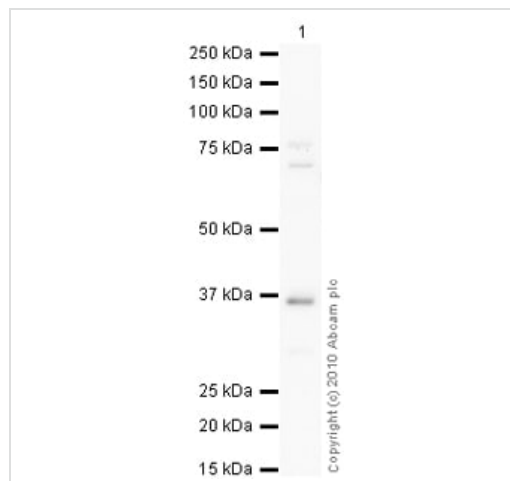
Post-translational modifications

The soluble form of isoform 1 derives from the membrane form by proteolytic processing (By similarity). The cleavage may be catalyzed by ADAM17.

Cellular localization

Cytoplasm; Secreted and Cell membrane.

Images



Western blot - Anti-RANKL antibody (ab9957)

Anti-RANKL antibody (ab9957) at 1 µg/ml + Human spleen tissue lysate - total protein ([ab29699](#)) at 10 µg

Secondary

Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (HRP), pre-adsorbed at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

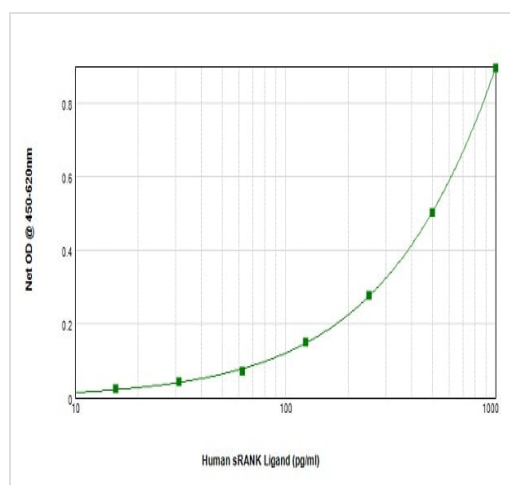
Predicted band size: 35 kDa

Observed band size: 37 kDa

Additional bands at: 72 kDa, 76 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 90 seconds

RANKL contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Sandwich ELISA - Anti-RANKL antibody (ab9957)

To detect human sRANKL by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.25 – 1.0 µg/ml of [ab83145](#) is required. This biotinylated polyclonal antibody, in conjunction with an anti-human sRANKL (ab9957) as a capture antibody, allows the detection of at least 0.2 – 0.4 ng/well of recombinant human sRANKL.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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