

Datasheet for MDBAb668556 anti-RANKL antibody (AA 221-300)

6 Images

12 Publications

Overview

Quantity:	100 µL
Target:	RANKL (TNFSF11)
Binding Specificity:	AA 221-300
Reactivity:	Human, Mouse, Rat, Rabbit, Guinea Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RANKL antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin- embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from mouse OPG
Isotype:	IgG
Predicted Reactivity:	Dog,Cow
Purification:	Purified by Protein A.

Target Details

Target:	RANKL (TNFSF11)
Alternative Name:	OPG (TNFSF11 Products)

Target Details

Background: Acts as decoy receptor for TNFSF11/RANKL and thereby neutralizes its function in osteoclastogenesis. Inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local ratio between TNFSF11 and TNFRSF11B. May also play a role in preventing arterial calcification. May act as decoy receptor for TNFSF1/TRAIL and protect against apoptosis. TNFSF1/TRAIL binding blocks the inhibition of osteoclastogenesis.

Subcellular location: Secreted

Synonyms: Opg, TR1, OCIF, Tumor necrosis factor receptor superfamily member 11B, Osteoclastogenesis inhibitory factor, Osteoprotegerin, Tnfrsf11b

Gene ID: 18383

UniProt: [O08712](#)

Pathways: [NF-kappaB Signaling](#)

Application Details

Application Notes: WB 1:300-5000
ELISA 1:500-1000
IHC-P 1:200-400
IHC-F 1:100-500
IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Handling

Storage Comment: Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Publications

Product cited in: Ghate, Das, Chaudhuri, Panja, Mandal: "Sundew plant, a potential source of anti-inflammatory agents, selectively induces G2/M arrest and apoptosis in MCF-7 cells through upregulation of p53 and Bax/Bcl-2 ratio." in: **Cell death discovery**, Vol. 2, pp. 15062, (2016) ([PubMed](#)).

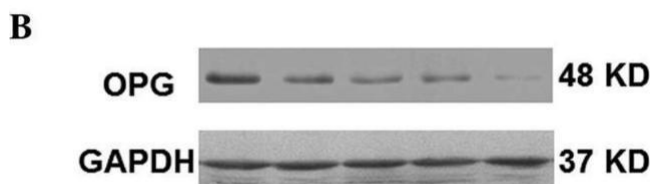
He, Zhang, Gan, Xu, Tang: "Expression of hyperpolarization-activated cyclic nucleotide-gated channel isoforms in a canine model of atrial fibrillation." in: **Experimental and therapeutic medicine**, Vol. 12, Issue 1, pp. 433-436, (2016) ([PubMed](#)).

Dai, Ye, Peng, Zhou, Bai, Xiao, Ma, Zhou, Tang, Yao, Cao, Qin, Liu, Tan: "Aptamer TY04 inhibits the growth of multiple myeloma cells via cell cycle arrest." in: **Tumour biology**, Vol. 35, Issue 8, pp. 7561-8, (2014) ([PubMed](#)).

Haolong, Du, Hongchao, Yang, Wei, Hua, Wenliang, Lei, Po: "Enterovirus 71 VP1 activates calmodulin-dependent protein kinase II and results in the rearrangement of vimentin in human astrocyte cells." in: **PLoS ONE**, Vol. 8, Issue 9, pp. e73900, (2013) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

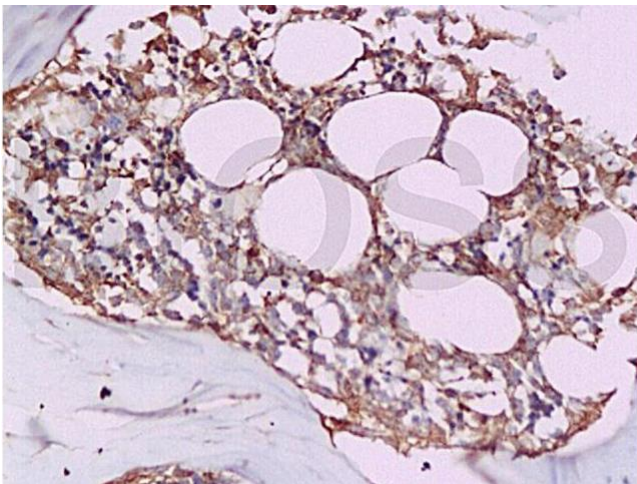
Images



Western Blotting

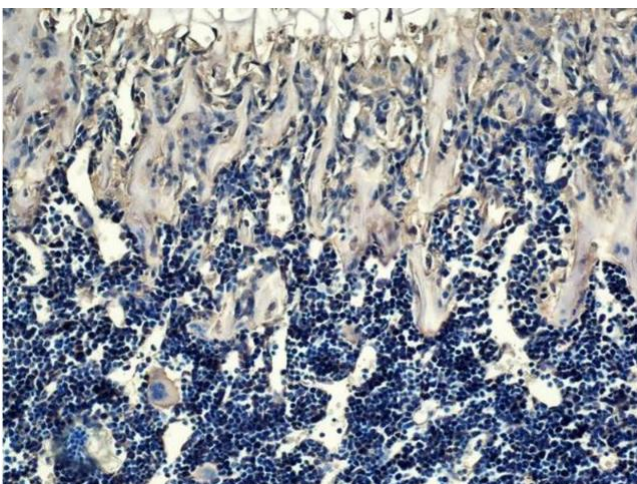
Image 1. Levels of OPG in third-generation osteoblasts following treatment with different doses of r-Mt cpn10 for 8 h. (A) Levels of OPG mRNA following treatment with the control or different doses of r-Mt cpn10 for 8 h. Cells were grown in serum-free medium for 24 h prior to stimulation. Total RNA was isolated from the harvested cells, transcribed to cDNA, and quantified by reverse transcription-quantitative polymerase chain reaction analysis. The amount of OPG mRNA was compared with the

amount of the reference gene (GAPDH) mRNA. Values are expressed as the mean \pm intra-assay variation of duplicate analyses. (B) Western blotting of OPG protein expression following treatment with the control or r-Mt cpn10 (0.01, 0.1, 1 and 10 $\mu\text{g}/\text{mL}$) for 8 h. (C) Quantification of the level of OPG protein following treatment with the control or r-Mt cpn10 (0.01, 0.1, 1 and 10 $\mu\text{g}/\text{mL}$) for 8 h. Results are expressed as the mean \pm standard deviation. ** $P < 0.01$ and *** $P < 0.001$ compared with the control. r-Mt, recombinant Mycobacterium tuberculosis, cpn10, 10- kDa co-chaperonin, OPG, osteoprotegerin. - figure provided by CiteAb. Source: PMID25667654



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded rat tibia tissue labeled with Anti-Osteoprotegerin Polyclonal Antibody (ABIN668556), Unconjugated at 1:200, followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry

Image 3. Generously provided by Markus Linder from Medical University Vienna as part of the Bioss Discovery Program. Formalin-fixed, paraffin embedded, and decalcified in EDTA mouse bone labeled with Anti-OPG Polyclonal Antibody, Unconjugated (ABIN668556) at 1:100 followed by conjugation to the secondary antibody and DAB staining