Overview

Product name: Anti-Osteoprotegerin antibody
Description: Rabbit polyclonal to Osteoprotegerin
Host species: Rabbit
Tested applications: Suitable for: WB, IHC-P
Species reactivity: Reacts with: Mouse, Human
Immunogen: Synthetic peptide within Human Osteoprotegerin aa 1-67. The exact sequence is proprietary.
Database link: O00300
Positive control: Raji whole cell lysate; Mouse heart lysate; Cal27 xenograft.

Properties

Form: Liquid
Storage buffer: pH: 7.00
Preservative: 0.025% Proclin 300
 Constituents: PBS, 20% Glycerol
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab183910 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<td>IHC-P</td>
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<td>1/100 - 1/1000.</td>
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**Function**
Acts as decoy receptor for 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 RANKL/OPG ratio. May also play a role in preventing arterial calcification. May act as decoy receptor for TRAIL and protect against apoptosis. TRAIL binding blocks the inhibition of osteoclastogenesis.

**Tissue specificity**
Highly expressed in adult lung, heart, kidney, liver, spleen, thymus, prostate, ovary, small intestine, thyroid, lymph node, trachea, adrenal gland, testis, and bone marrow. Detected at very low levels in brain, placenta and skeletal muscle. Highly expressed in fetal kidney, liver and lung.

**Involvement in disease**
Defects in TNFRSF11B are the cause of juvenile Paget disease (JPD) [MIM:239000]; also known as hyperostosis corticalis deformans juvenilis or hereditary hyperphosphatasia or chronic congenital idiopathic hyperphosphatasia. JPD is a rare autosomal recessive osteopathy that presents in infancy or early childhood. The disorder is characterized by rapidly remodeling woven bone, osteopenia, debilitating fractures, and deformities due to a markedly accelerated rate of bone remodeling throughout the skeleton. Approximately 40 cases of JPD have been reported worldwide. Unless it is treated with drugs that block osteoclast-mediated skeletal resorption, the disease can be fatal.

**Sequence similarities**
Contains 2 death domains.
Contains 4 TNFR-Cys repeats.

**Post-translational modifications**
N-glycosylated. Contains sialic acid residues.
The N-terminus is blocked.

**Cellular localization**
Secreted.

**Images**

Immunohistochemical analysis of paraffin-embedded Cal27 xenograft labeling OPG with ab183910 at 1/500 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Osteoprotegerin antibody (ab183910)
Anti-Osteoprotegerin antibody (ab183910) at 1/1000 dilution + Mouse heart lysate at 50 µg

**Predicted band size:** 46 kDa

10% SDS-PAGE

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Anti-Osteoprotegerin antibody (ab183910) at 1/1000 dilution + Raji whole cell lysate at 30 µg

**Predicted band size:** 46 kDa

10% SDS-PAGE

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

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