

## Product datasheet

# Recombinant Human Osteoprotegerin protein ab110188

### Overview

---

<b>Product name</b>	Recombinant Human Osteoprotegerin protein
<b>Protein length</b>	Full length protein

### Description

---

<b>Nature</b>	Recombinant
<b>Source</b>	Yeast

### Amino Acid Sequence

<b>Species</b>	Human
<b>Sequence</b>	METFPPKYLH YDEETSHQLL CDKCPPGTYL KQHCTAKWKT VCAPCPDHYY TDSWHTSDEC LYCSPVCKEL QYVKQECNRT HNRVCECKEG RYLEIEFCLK HRSCPPGFGV VQAGTPERN VCKRCPDGFF SNETSSKAPC RKHTNCSVFG LLLQKGNAT HDNICSGNSE STQK

### Specifications

---

Our [Abpromise guarantee](#) covers the use of **ab110188** in the following tested applications.

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

<b>Applications</b>	Functional Studies SDS-PAGE Blocking - Blocking peptide for Anti-Osteoprotegerin antibody ( <a href="#">ab9986</a> )
<b>Endotoxin level</b>	< 0.100 Eu/μg
<b>Form</b>	Lyophilised

### Preparation and Storage

---

<b>Stability and Storage</b>	Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Please see notes section.
------------------------------	--

<b>Reconstitution</b>	Centrifuge the vial prior to opening. Reconstitute in 5 mM Tris, pH 7.5 to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8oC for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20oC to -80o C.
<hr/>	
<b>General Info</b>	
<hr/>	
<b>Function</b>	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.
<b>Tissue specificity</b>	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.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Contains 2 death domains. Contains 4 TNFR-Cys repeats.
<b>Post-translational modifications</b>	N-glycosylated. Contains sialic acid residues. The N-terminus is blocked.
<b>Cellular localization</b>	Secreted.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors