

[Go to Product page](#)

Datasheet for ABIN7198429

Osteoprotegerin Protein (His tag)

Overview

Quantity:	100 µg
Target:	Osteoprotegerin (TNFRSF11B)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Osteoprotegerin protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Osteoprotegerin/TNFRSF11B Protein (His Tag)(Active)
Sequence:	Met 1-Leu 401
Characteristics:	A DNA sequence encoding the human TNFRSF11B (NP_002537.3) (Met 1-Leu 401) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	1. Measured by its ability to inhibit TRAIL-mediated cytotoxicity using L-929 mouse fibroblast cells treated with TRAIL. The ED50 for this effect is typically 5-20 ng/mL in the presence of 20 ng/mL Recombinant Human TRAIL/TNFSF10.2. Measured by its binding ability in a functional ELISA. Immobilized human TNFRSF11B-His at 10 µg/ml (100 µl/well) can bind human Fc-TNFSF11 with a linear rangel of 3.125-200 ng/mL.

Target Details

Target:	Osteoprotegerin (TNFRSF11B)
Alternative Name:	Osteoprotegerin/TNFRSF11B (TNFRSF11B Products)
Target Type:	Chemical
Background:	<p>Background: Osteoprotegerin or TNFRSF11B is a member of the TNF-receptor superfamily. This protein is an osteoblast-secreted decoy receptor that functions as a negative regulator of bone resorption. This protein specifically binds to its ligand, osteoprotegerin ligand, both of which are key extracellular regulators of osteoclast development. Studies of the mouse counterpart also suggest that this protein and its ligand play a role in lymph-node organogenesis and vascular calcification. Alternatively spliced transcript variants of this gene have been reported, but their full length nature has not been determined.</p> <p>Osteoprotegerin/TNFRSF11B acts as decoy receptor for RANKL and thereby neutralizes its function in osteoclastogenesis. This protein may inhibit the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local RANKL/OPG ratio. Osteoprotegerin/TNFRSF11B also play a role in preventing arterial calcification, act as decoy receptor for TRAIL and protect against apoptosis. TRAIL binding blocks the inhibition of osteoclastogenesis.</p> <p>Synonym: Tumor necrosis factor receptor superfamily member 11B, Osteoclastogenesis inhibitory factor, Osteoprotegerin, TNFRSF11B, OCIF, OPG,PDB5,TR1</p>

Molecular Weight: 45.3 kDa

NCBI Accession: [NP_002537](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.