

## Recombinant Human TNFRSF11B Protein(His Tag)

Catalog Number: PDMH100166

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

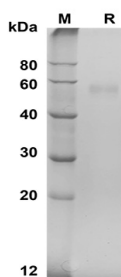
### Description

Species	Human
Source	Mammalian-derived Human TNFRSF11B protein Met1-Leu401, with an C-terminal His
Mol_Mass	44 kDa
Accession	O00300
Bio-activity	Not validated for activity

### Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

### Data



SDS-PAGE analysis of Human TNFRSF11B proteins,  
2µg/lane of Recombinant Human TNFRSF11B proteins was  
resolved with SDS-PAGE under reducing conditions,  
showing bands at 58 kDa

### Background

### For Research Use Only

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. 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.