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## TNFRSF11B

## Recombinant Human Osteoprotegerin / TNFRSF11B (Fc Tag)

Catalog No. CRH435A-Fc Quantity: 50 μg

CRH435B-Fc 100 μg

Alternate Names: Tumor necrosis factor receptor superfamily member 11B, Osteoclastogenesis inhibitory

factor, Osteoprotegerin

**Description:** 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.

UniProt ID: 000300

Accession Number: NP\_002537.3

Protein Construction: The DNA sequence encoding the human TNFRSF11B (Met 1- Leu 401) was expressed

with the Fc region of human IgG1 at the C-terminus.

Source: Baculovirus-Insect cells

Molecular Weight: The recombinant human TNFRSF11B consists of 618 amino acids and predicts a

molecular mass of 70.3 kDa.

Formulation: Lyophilized from sterile pH 7.0, 100 mM Glycine, 10 mM NaCl.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants

E-mail: info@cellsciences.com

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before lyophilization.

**Purity:** > 95% by SDS-PAGE

**Endotoxin Level:**  $< 1.0 \text{ EU/}\mu\text{g}$  as determined by LAL method.

Predicted N terminal: Glu 22

**Reconstitution:** Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1

mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C

After reconstitution, store working aliquots at -20°C to -80°C.

Toll Free: 888-769-1246

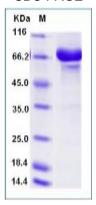
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Fax: 978-992-0298

Avoid repeated freeze-thaw cycles.

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