

## A Reliable Research Partner in Life Science and Medicine

## Recombinant Human Osteoprotegerin/TNFRSF11B Protein (Fc Tag)

PKSH033124 Catalog No.

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

#### **Description**

**Synonyms** Tumor necrosis factor receptor superfamily member 11B;Osteoclastogenesis

inhibitory factor;Osteoprotegerin;TNFRSF11B;OCIF;OPG;PDB5;TR1

**Species** Human

**Expression Host** HEK293 Cells **Sequence** Glu22-Leu201 O00300 Accession Calculated Molecular Weight 47.2 kDa Observed molecular weight 50-80 kDa

Tag C-Fc

Loaded Recombinant Human OPG-Fc on Pro A Biosensor, can bind Mouse **Bioactivity** 

RANKL-His with an affinity constant of 1.02 pM as determined in BLI assay.

## **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per µg of the protein as determined by the LAL method.

Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to **Storage** 

-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 of PBS, pH 7.4.

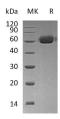
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

#### Data



> 95 % as determined by reducing SDS-PAGE.

### **Background**

#### For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017 Email: techsupport@elabscience.com

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# Elabscience®

#### **Elabscience Bionovation Inc.**

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TNFRSF11B is a secreted protein; containing 2 death domains and 4 TNFR-Cys repeats. TNFRSF11B is a decoy receptor for the receptor activator of nuclear factor kappa B ligand (RANKL). By binding RANKL; TNFRSF11B inhibits nuclear kappa B (NF-κB) which is a central and rapid acting transcription factor for immune-related genes; and a key regulator of inflammation; innate immunity; and cell survival and differentiation. TNFRSF11B levels are influenced by voltagedependent calcium channelsCav1.2. TNFRSF11B can reduce the production of osteoclasts by inhibiting the differentiation of osteoclast precursors into osteoclasts and also regulates the resorption of osteoclasts in vitroand in vivo. TNFRSF11B binding to RANKL on osteoblast/stromal cells; blocks the RANKL-RANK ligand interaction between osteoblast/stromal cells and osteoclast precursors. This has the effect of inhibiting the differentiation of the osteoclast precursor into a mature osteoclast.

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