

OPG/TNFRSF11B (C-6His), Human, Recombinant

Cat. No. : PCK213

General Information

Synonyms	Tumor Necrosis Factor Receptor Superfamily Member 11B;Osteoclastogenesis Inhibitory Factor;Osteoprotegerin;TNFRSF11B;OCIF;OPG
Species	Human
Expression host	Human Cells
Sequence	Glu22-Leu401
Accession	O00300
Mol mass	44.65 kDa
Expiration date	12 months
Bio activity	Measured by its ability to inhibit TRAIL-mediated cytotoxicity using L-929 mouse fibroblast cells treated with TRAIL. The ED50 for this effect is 10.6 ng/mL.

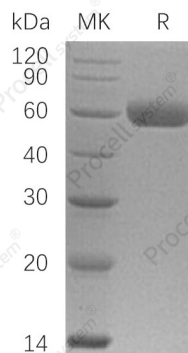
Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

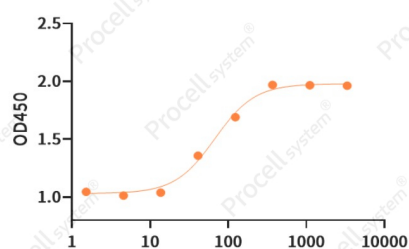
Background

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 voltage-dependent calcium channelsCav1.2. TNFRSF11B can reduce the production of osteoclasts by inhibiting the differentiation of osteoclast precursors (osteoclasts are related to monocytes/macrophages and are Derived from granulocyte/macrophage-forming colony units (CFU-GM)) 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.

SDS-PAGE



Bio activity



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