

## 32-8612: Recombinant Human TNF Receptor Superfamily Member 11B/OPG (C-Fc)

**Gene :** TNFRSF11B

**Gene ID :** 4982

**Uniprot ID :** O00300

### Description

Source: Human Cells.

MW :47.2kD.

Recombinant Human Osteoprotegerin is produced by our Mammalian expression system and the target gene encoding Glu22-Leu201 is expressed with a Fc tag at the C-terminus. 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- $\kappa$ B) 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 channels Cav1.2. TNFRSF11B can reduce the production of osteoclasts by inhibiting the differentiation of osteoclast precursors into osteoclasts and also regulates the resorption of osteoclasts in vitro and 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.

### Product Info

**Amount :** 10  $\mu$ g / 50  $\mu$ g

**Content :** Lyophilized from a 0.2  $\mu$ m filtered solution of PBS, pH7.4.

**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

**Amino Acid :** ETFPKYLHYDEETSHQLLCDKCPPGTLYKQHCTAKWKTVCAPCPDHYYTDSWHTSDECLYCSPVCKELQYVK  
QECNRTHNRVCECKEGRYLEIEFCLKHRSCPPGFGVVQAGTPERNTVCKRCPDGGFFSNETSSKAPCRKHTNCS  
VFGLLLTQKGNATHDNICSGNSEQKCGIDVTLDIEGRMDPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDT  
LMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCK  
VSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV  
LDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

### Application Note

**Endotoxin :** Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g) as determined by LAL test.