

## **32-9000: Recombinant Mouse Tumor Necrosis Factor Receptor Superfamily Member 11B/Osteoprotegerin/TNFRSF11B (C-10His)**

 Gene :
 Tnfrsf11b

 Gene ID :
 18383

 Uniprot ID :
 008712

## Description

Source: Human Cells.

MW :45.1kD.

Recombinant Mouse Tumor Necrosis Factor Receptor Superfamily Member 11B is produced by our Mammalian expression system and the target gene encoding Glu22-Leu401 is expressed with a 10His tag at the C-terminus. Osteoprotegerin (OPG, Tnfrsf11b) is a secreted protein that regulates bone density. OPG is widely expressed and constitutively released as a homodimer by mesenchymal stem cells, fibroblasts and endothelial cells. Regulation of its expression by estrogen, parathyroid hormone and cytokines is complex and changes with age. OPG acts as decoy receptor for TNFSF11/RANKL and thereby neutralizes its function in osteoclastogenesis. TRAIL decreases the release of OPG from cells that express it, while OPG inhibits TRAIL-induced apoptosis. Expression of RANK L on the cell surface, and thus its ability to stimulate osteoclastogenesis, is regulated by OPG by intracellular and extracellular mechanisms. Bone homeostasis seems to depend on the local ratio between TNFSF11 and TNFRSF11B. It may also play a role in preventing arterial calcification.

## **Product Info**

Amount :	10 μg / 50 μg
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 :	ETLPPKYLHYDPETGHQLLCDKCAPGTYLKQHCTVRRKTLCVPCPDHSYTDSWHTSDECVYCSPVCKELQSVK QECNRTHNRVCECEEGRYLEIEFCLKHRSCPPGSGVVQAGTPERNTVCKKCPDGFFSGETSSKAPCIKHTNCST FGLLLIQKGNATHDNVCSGNREATQKCGIDVTLCEEAFFRFAVPTKIIPNWLSVLVDSLPGTKVNAESVERIKRR HSSQEQTFQLLKLWKHQNRDQEMVKKIIQDIDLCESSVQRHLGHSNLTTEQLLALMESLPGKKISPEEIERTRKT CKSSEQLLKLLSLWRIKNGDQDTLKGLMYALKHLKTSHFPKTVTHSLRKTMRFLHSFTMYRLYQKLFLEMIGNQ VQSVKISCLGGGGSHHHHHHHHH

## **Application Note**

**Endotoxin :** Less than 0.1 ng/ $\tilde{A}$  $\square$  $\hat{A}\mu$ g (1 IEU/ $\tilde{A}$  $\square$  $\hat{A}\mu$ g) as determined by LAL test.