

## **Product datasheet for TP727344**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Osteoprotegerin (TNFRSF11B) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant Human TNF Receptor Superfamily Member 11B/OPG (C-Fc)

Species: Human

**Expression cDNA Clone** 

or AA Sequence:

Glu22-Leu201

Tag: C-Fc

**Buffer:** Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.

Note: 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.

**Storage:** 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.

**Stability:** 12 months from date of despatch

Locus ID: 4982 UniProt ID: 000300

Synonyms: Tumor necrosis factor receptor superfamily member 11B; Osteoclastogenesis inhibitory

factor; Osteoprotegerin; TNFRSF11B; OCIF; OPG

**Summary:** 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 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.

**Protein Families:** Druggable Genome, Secreted Protein







**Protein Pathways:** Cytokine-cytokine receptor interaction