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## Product Datasheet

### Recombinant Human OPG (C-6His) EBT-EPT052

Article Name	Recombinant Human OPG (C-6His)
Biozol Catalog Number	EBT-EPT052
Supplier Catalog Number	EPT052
Alternative Catalog Number	EBT-EPT052-10
Manufacturer	ELK Biotechnology
Category	Proteine/Peptide
Product Description	Recombinant Human Osteoprotegerin is produced by our Mammalian expression system and the target gene encoding Glu22-Leu401 is expressed with a 6His tag at the C-terminus....
Molecular Weight	Molecular weight: 44.65 KDa. Apparent molecular weight: 57 KDa, reducing conditions
UniProt	<a href="#">000300</a>
Purity	Greater than 95% as determined by reducing SDS-PAGE.

Application Notes

Redissolve: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Endotoxin: Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test. 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-kappaB) 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 (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 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