

Recombinant Human Osteoprotegerin/OPG/TNFRSF11B (C-His)

Catalog No: BP073

Description	Recombinant Human Osteoprotegerin is produced by Human 293 Cells. The target gene encoding E22-L401 is expressed with an 8His tag at the C terminus.
Expression System	Human
Alternative name	Tumor Necrosis Factor Receptor Superfamily Member 11B; Osteoclastogenesis InhibitoryFactor; Osteoprotegerin; TNFRSF11B; OCIF; OPG
Accession No.	O00300
Predicted Molecular Weight	47.3kDa
Apparent Molecular Weight	OPG appeared as a smear at 50-65kDa in a reducing SDS-PAGE gel due to glycosylation.
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by TAL test.
Formulation	PBS, pH 7.4
Reconstitution	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.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
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. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Background	Osteoprotegerin (OPG) is a secreted homodimer protein that belongs to tumor necrosis factor receptor superfamily. OPG is highly expressed in fetal kidney, liver and lung. It is up-regulated by increasing calcium-concentration in the medium and estrogens and down-regulated by glucocorticoids. OPG can have multiple effects on TNFSF10 and TNFSF11. As a decoy receptor for TNFSF11/RANKL, OPG neutralizes its function in osteoclastogenesis. OPG also inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local ratio between TNFSF11 and TNFRSF11B. TNFSF10/TRAIL binding blocks the inhibition of osteoclastogenesis.

SDS-PAGE

