

## Human Osteoprotegerin / TNFRSF11B (His-tagged) - Purified

<b>Alternate names:</b>	OCIF, OPG, Osteoclastogenesis inhibitory factor, Tumor necrosis factor receptor superfamily member 11B
<b>Catalog No.:</b>	AR10017PU-N
<b>Quantity:</b>	50 µg
<b>Background:</b>	Osteoprotegerin, which is a member of the tumor necrosis factor receptor superfamily and is involved in the regulation of bone metabolism. OPG and its ligand (OPGL) are cytokines regulating osteoclasto-genesis. OPGL binds to receptors on the surface of preosteoclasts and stimulates their differentiation into active osteoclasts. This leads to osteoresorption. OPG inhibits this osteoclasto-genesis (OPG is secreted by osteoblasts, and binds to OPGL, thus inhibiting maturation of osteoclasts and osteoresorption). The degree and activity of osteoresorption depend mainly on the balance between OPG and its ligand (OPGL); factors increasing OPGL expression mostly reduce OPG expression and vice versa.
<b>Uniprot ID:</b>	<a href="#">Q00300</a>
<b>NCBI:</b>	<a href="#">NP_002537.3</a>
<b>GeneID:</b>	<a href="#">4982</a>
<b>Species:</b>	Human
<b>Source:</b>	E. coli
<b>Format:</b>	<b>State:</b> Sterile Filtered White lyophilized (freeze-dried) powder. <b>Purity:</b> >80.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. <b>Buffer System:</b> Llyophilized from a concentrated (1 mg/ml) solution with 1x PBS, 0.1% SDS and 1mM DTT. <b>Reconstitution:</b> It is recommended to restore in sterile 18MΩ·cm <sup>-1</sup> H <sub>2</sub> O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
<b>Applications:</b>	1. Positive control for Western blot. 2. Antibody production. 3. Protein assay. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Description:</b>	Recombinant Human OCIF produced in <i>E.coli</i> cells is a single, non-glycosylated, polypeptide chain containing amino acids 201-401 and having a molecular mass of 31 kDa which includes a 4 kDa His tag. The OPG is purified by proprietary chromatographic techniques. <b>Molecular weight:</b> 31 kDa

**Storage:**

Lyophilized Osteoprotegerin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution OCIF should be stored at 2-8°C between 2-7 days and for future use below -18°C.  
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).  
Please prevent freeze-thaw cycles.