

32-1640: OPG Recombinant Protein

Alternative Name : TNFRSF11B,OPG,OCIF,Osteoclastogenesis inhibitory factor,Osteoprotegerin,TR1,MGC29565.

Description

Source : Escherichia Coli. Recombinant Human Osteoprotegerin produced in E.coli cells is a single, non-glycosylated, polypeptide chain containing 174 amino acids and having a molecular mass of 20kDa. The OPG is purified by proprietary chromatographic techniques. Osteoprotegerin acts as decoy receptor for rankl and thereby neutralizes its function in osteoclastogenesis. OPG inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local rankl/opg ratio. Osteoprotegerin may also play a role in preventing arterial calcification. May act as decoy receptor for trail and protect against apoptosis. Trail binding blocks the inhibition of osteoclastogenesis.

Product Info

Amount :	50 µg
Purification :	Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	The OPG was lyophilized from a 0.2µm filtered concentrated (0.5mg/ml) solution in PBS, pH 7.4.
Storage condition :	Lyophilized Osteoprotegerin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution OCIF should be stored at 4°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.
Amino Acid :	METFPPKYLH YDEETSHQLL CDKCPPGYL KQHCTAKWKT VCAPCPDHYY TDSWHTSDEC LYCSPVCKEL QYVKQECNRT HNRVCECKEG RYLEIEFCLK HRSCPPGFGV VQAGTPERNV VCKRCPDGFF SNETSSKAPC RKHTNCSVFG LLLTQKGNAT HDNICSGNSE STQK.

Application Note

It is recommended to reconstitute the lyophilized Osteoprotegerin in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions. The activity is determined by its ability to neutralize the stimulation of U937 cells treated with 10ng/ml of soluble RANKL corresponding to a specific activity of 100,000IU/mg.