

TNFRSF11b

Recombinant Human Osteoprotegerin/Fc Chimera

Catalog No.	CRO109A CRO109B CRO109C	Quantity:	10 µg 50 µg 1.0 mg
Alternate Names:	Tumor necrosis factor receptor superfamily member 11B, Osteoclastogenesis inhibitory factor, OPG		
Description:	<p>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.</p> <p>Recombinant OPG produced in yeast contains 412 amino acid residues, including 180 residues from mature OPG (a.a 22-201) and 232 residues from the Fc protein of human IgG1, and has a calculated molecular mass of 46.5 kDa. As a result of glycosylation, the recombinant Osteoprotegerin migrates as a 49 kDa protein in SDS-PAGE under reducing conditions.</p>		
UniProt ID:	O00300		
Gene ID:	4982		
Source:	<i>Pichia Pastoris</i>		
Molecular Weight:	Calculated MW = 46.5 kDa. As a result of glycosylation, the recombinant OPG migrates as a 49 kDa protein in SDS-PAGE under reducing conditions.		
Formulation:	Lyophilized from a sterile-filtered 0.5 mg/ml solution in PBS, pH 7.4		
Purity:	> 90% as determined by SDS-PAGE and HPLC analyses		
Endotoxin Level:	< 0.1 ng/µg of OPG		
Purification:	The OPG is purified by proprietary chromatographic techniques.		
Specific Activity:	≥ 1.0 x 10 ⁵ IU/mg, determined by its ability to neutralize the stimulation of U937 cells treated with 10ng/ml of soluble RANKL (sRANKL).		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/mL. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	Lyophilized preparation is stable at 2-8°C, but should be stored at -20°C to -80°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, prepare working aliquots and store at -20°C to -80°C. Avoid repeated freeze/thaw cycles.		



Amino Acid Sequence: OPG 22-201: ETFPPKYLHY DEETSHQLLC DKCPPGTYLK QHCTAKWKTVCAPCPDHYYT DSWHTSDECL YCSPVCKELQ YVKQECNRTH NRVCECKEGR YLEIEFCLKH RSCPPGFGVV QAGTPERNV CKRCPDGFFS NETSSKAPCR KHTNCSVFGL LLTQKGNATH DNICSGNSES TQKCGIDVTL ETFPPKYLHY DEETSHQLLC DKCPPGTYLK QHCTAKWKTVCAPCPDHYYT DSWHTSDECL YCSPVCKELQ YVKQECNRTH NRVCECKEGR YLEIEFCLKH RSCPPGFGVV QGTPERNVCKRCPDGFSNE TSSKAPCRKH TNCSVFGLLL TQKGNATHDN ICSGNESTQ KCGIDVTL

Fc232: ETFPPKYLHY DEETSHQLLC DKCPPGTYLK QHCTAKWKTVCAPCPDHYYT DSWHTSDECL YCSPVCKELQ YVKQECNRTH NRVCECKEGR YLEIEFCLKH RSCPPGFGVV QAGTPERNV CKRCPDGFFS NETSSKAPCR KHTNCSVFGL LLTQKGNATH DNICSGNSES TQKCGIDVTL ETFPPKYLHY DEETSHQLLC DKCPPGTYLK QHCTAKWKTVCAPCPDHYYT DSWHTSDECL YCSPVCKELQ YVKQECNRTH NRVCECKEGR YLEIEFCLKH RSCPPGFGVV QGTPERNVCKRCPDGFSNE TSSKAPCRKH TNCSVFGLLL TQKGNATHDN ICSGNESTQ KCGIDVTL EPKSSDKTHT CPPCPAPEFE GAPSVFLFPP KPKDTLMISR TPEVTCVVVD VSHEDPEVKF NWWYVDGVEVH NAKTKPREEQ YNSTYRVVSV LTVLHQDWLN GKEYKCKVSN KALPTPIEKT ISKAKGQREP QVYTLPPSRD ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGDSFFL YSKLTVDKSR WQQGNVFSCS VMHEALHNHY TQKSLSLSPG K

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