9051 Mira Mesa Blvd, #910094
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OPG Fc Human

Osteoprotegerin Human Recombinant /Fc Chimera
GRF0287

Product Overview

Name	OPG Fc Human
Description	
Osteoprotegerin Human Recombinant /Fc Chimera	
Accession (Primary)	O00300
Synonyms	
TNFRSF11B, OPG, OCIF, Osteoclastogenesis inhibitory factor, TR1, MGC29565.	
Introduction	
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.	
Source	
Pichia Pastoris.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
OPG was lyophilized from a 0.2 µm filtered concentrated solution in 20mM PB, pH 6.0, 150mM NaCl and 0.02 % Tween-80.	
Stability	
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.	
Purity	
Greater than 90.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.	
Amino acid sequence	
OPG 22-201 ETFPPKYLHY DEETSHQLLC DKCPPGTYLK QHCTAKWKTV CAPCPDHYYT DSWHTSDECL YCSPVCKELQ YVKQECNRTH NRVCECKEGR YLEIEFCLKH RSCPPGFGVV QAGTPERNTV CKRCPDGFFS NETSSKAPCR KHTNCSVFGL LLTQKGNATH DNICSGNSES TQKCGIDVTL Fc232 EPKSSDKTHT CPPCPAPEFE	

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GAPSVFLFPP KPKDTLMISR TPEVTCVVVD VSHEDPEVKF NWYVDGVEVH NAKTKPREEQ YNSTYRVVSV LTVLHQDWLN GKEYKCKVSN KALPTPIEKT ISKAKGQPRE PQVYTLPPSR DELTKNQVSL TCLVKGFYPS DIAVEWESNG QPENNYKTTP PVLDSDGSFF LYSKLTVDKS RWQQGNVFSC SVMHEALHNH YTQKSLSLSP GK

Biological Activity

The ED 50 as determined by neutralizing the stimulation of U937 cells is less tha10ng/ml, corresponding to a specific activity of > 1.0 × 10 5 IU/mg in the presence of 10ng/ml soluble Human RANKL (sRANKL).

Solubility

It is recommended to reconstitute the lyophilized Osteoprotegerin in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

OPG Fc Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (O00300)