

9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

## 32-1639: OPG Fc Recombinant Protein

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

## **Description**

Source: Pichia Pastoris. Recombinant OPG produced in yeast contains 2x412 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 109.6kDa. 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:  $50 \mu g$ 

**Purification :** Greater than 90.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Content:

OPG was lyophilized from a 0.2µm filtered concentrated solution in 20mM PB, pH 6.0, 150mM

NaCl and 0.02 % Tween-80.

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

**Storage condition :**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: OPG 22-201

## **Application Note**

It is recommended to reconstitute the lyophilized Osteoprotegerin in sterile  $18M\tilde{A} \Box \hat{A} \odot$ -cm H2O not less than  $100\tilde{A} \Box \hat{A} \mu g/ml$ , which can then be further diluted to other aqueous solutions. The ED50 as determined by neutralizing the stimulation of U937 cells is less than 10 ng/ml, corresponding to a specific activity of > 100,000lU/mg in the presence of 10ng/ml soluble human RANKL (sRANKL).

