

PrimeGene Technical Data Sheet

Catalog Number:	108-08
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 19.7 kDa, a single non-glycosylated polypeptide chain containing 173 amino acids.
Quantity:	10µg/50µg/1000µg
AA Sequence:	ETFPPKYLHY DEETSHQLLC DKCPPGTYLK QHCTAKWKTV CAPCPDHYTT DSWHTSDECL YCSPVCKELQ YVKQECNRTH NRVCECKEGR YLEIEFCLKH RSCPPGFGVV QAGTPERNV CKRCPDGFFS NETSSKAPCR KHTNCSVFGL LLTQKGNATH DNICSGNSES TQK
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by neutralizing the stimulation of U937 cells is less than 10 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁵ IU/mg in the presence of 10 ng/mL soluble rHuRANKL (sRANKL).
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, 150 mM NaCl, pH 6.0.
Endotoxin:	Less than 1 EU/µg of rHuOPG as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Osteoprotegerin

Osteoprotegerin (OPG), also named osteoclastogenesis inhibitory factor (OCIF), and tumor necrosis factor receptor superfamily member 11B (TNFRSF11B), is a TNFRSF11B-encoded protein in humans. OPG is a 401 a.a. basic glycoprotein which comprises 7 structural domains. It is either a 60 kDa monomer or a 120 kDa dimer linked by disulfide bridges. OPG acts as a decoy receptor for the receptor activator of nuclear factor kappa B ligand (RANKL) and inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro and may also play a role in preventing arterial calcification. OPG has been applied to decrease bone resorption in women with postmenopausal osteoporosis and in patients with lytic bone metastases. Mature human OPG shares 86 %, 87 %, 92 %, 92 % and 88 % amino acid sequence identity with mouse, rat, equine, canine and bovine OPG, respectively.