

Recombinant Human Osteoprotegerin Fc Chimera (rHuOPG-Fc)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	108-08A
Source:	<i>Yeast</i>
Molecular Weight:	Approximately 109.6 kDa, a disulfide-linked homodimeric protein containing two 412 amino acids.
Quantity:	10µg/50µg/1000µg
AA Sequence:	ETFPPKYLHY DEETSHQLLC DKCPPGTYLK QHCTAKWKTVCAPCPDHYTT DSWHTSDECL YCSPVCKELQ YVKQECNRTH NRVCECKEGR YLEIEFCLKH RSCPPGFGVV QAGTPERNV CKRCPDGFFS NETSSKAPCR KHTNCSVFGL LLTQKGNATH DNICSGNSES TQKCGIDVTL EPKSSDKTHT CPPCPAPEFE GAPSVFLFPP KPKDTLMISR TPEVTCVVVD VSHEDPEVKF NWYVDGVEVH NAKTKPREEQ YNSTYRVVSV LTVLHQDWLN GKEYKCKVSN KALPTPIEKT ISKAKGQPRE PQVYTLPPSR DELTKNQVSL TCLVKGFYPS DIAVEWESNG QPENNYKTTTP VLDSGDGFFS LYSKLTVDKS RWQQGNVFSC SVMHEALHNH YTQKSLSLSP GK
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 0.2µm filtered concentrated solution in 20 mM PB, pH 6.0, 150 mM NaCl, 0.02 % Tween-80.
Endotoxin:	Less than 1 EU/µg of rHuOPG-Fc 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:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Human Osteoprotegerin

Osteoprotegerin (OPG) is a member of the TNFR superfamily that can act as a decoy receptor for RANKL. Binding of soluble OPG to sRANKL inhibits osteoclastogenesis by interrupting the signaling between stromal cells and osteoclastic progenitor cells, thereby leading to excess accumulation of bone and cartilage. OPG is expressed in a wide variety of tissues including adult heart, lung, kidney, liver, spleen, prostate, lymph node and bone marrow. OPG is secreted both as a monomeric and a dimeric protein. Its primary structure consists of seven distinct domains, four of which corresponds to the extracellular cysteine-rich domains of TNFR proteins and constitutes the soluble OPG.