Recombinant human OPG/TNFRSF11B protein

Catalog Number: OPG0905

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
22-401aa

UniProt No.
O00300

NCBI Accession No.
NP_002537.3

Alternative Names
Tumor necrosis factor receptor superfamily member 11B, Osteoclastogenesis inhibitory factor, Osteoprotegerin, OCIF, OPG, TR1

PRODUCT SPECIFICATION

Molecular Weight
44.7 kDa (389aa)
(On SDS-PAGE under denatured condition, apparent Molecular weight of glycosylated rhOPG protein will appear at approximately 55 kDa)

Concentration
0.5 mg/ml (determined by Bradford assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Measured by its ability to inhibit cytotoxicity using Jurkat human acute T cell leukemia cells in the presence of 2ng/ml of human TRAIL (CAT# ATGP3588). The ED50 range ≤ 8 ng/ml.

Tag
His-Tag

Application
SDS-PAGE, Bioactivity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

Osteoprotegerin (OPG) is a member of the tumor necrosis factor (TNF) -related family, is referred to as TNFRSF11B and part of the OPG/receptor activator of NF-kB ligand (RANKL) /receptor activator of NF-kB (RANK) triad. This cytokine that lacks any apparent cell-association motifs and exists as a soluble secreted protein, network regulates the differentiation and activation of osteoclasts and hence the critical balance between bone formation (osteoblasts) and bone resorption (osteoclasts). Recombinant human osteoprotegerin protein, fused to His-tag at C-terminus, was expressed in Hi-5 cell using baculovirus expression system and purified by using conventional chromatography techniques.

Amino acid Sequence

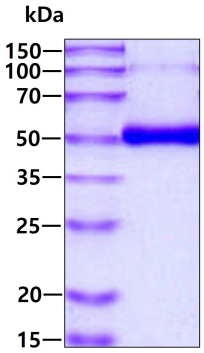
<ADP>ETFPPKY LHYDEETSHQ LLCDKCPPGT YLKQHCTAKW KTVCAPCPDH YYTDSWHTSD ECLYCSPVCK ELQYVKQECN RTHNRVCECK EGRYLEIEFC LKHRSCPPGF GVVQAGTPER NTVCKRCPDG FFSNETSSKA PCRKHTNCSV FGLLLTQKGN ATHDNICSGN SESTQKCGID VTLCEEAFFR FAVPTKFTPN WLSVLVDNLP GTKVNAESVE RIKRQHSSQE QTFQLLKLWK HQNKDQDIVK KIIQDIDLCE NSVQRHIGHA NLTFEQLRSL MESLPGKKVG AEDIEKTIKA CKPSDQILKL LSLWRIKNGD QDTLKGLMHA LKHSKTYHFP KTVTQSLKKT IRFLHSFTMY KLYQKLFLEM IGNQVQSVKI SCL<HHHHHH>

General References

Lacey, D.L. et al. (1998) Cell 93:165-76
Yasuda H. et al. (1998) PNAS 95:3597-602
A. Van Campenhout, Golledge J. (2009) Atherosclerosis 204:321-29

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

Biological Activity

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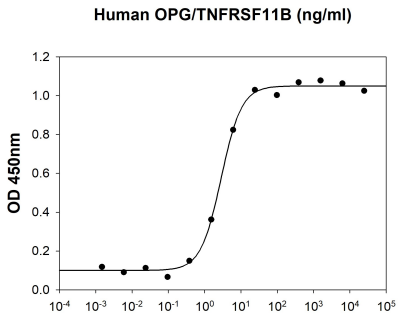

Human Human OPG/TNFRSF11B inhibits Human TRAIL (CAT# ATGP3588) cytotoxicity in the Jurkat human acute T cell leukemia cells. The ED50 range ≤ 8 ng/ml.