

## Product datasheet for **TA336370**

### Osteoprotegerin (TNFRSF11B) Mouse Monoclonal Antibody [Clone ID: 98A1071]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	98A1071
Applications:	CyTOF-ready, ELISA, FC, ICC/IF, IHC, IP, WB
Recommended Dilution:	Western Blot: 1 ug/ml, Immunohistochemistry-Paraffin: 1:100-1:1000, Immunohistochemistry: 1:100-1:1000, CyTOF-ready, ELISA, Flow Cytometry: 0.2-1 ug/1 million cells, Immunocytochemistry/ Immunofluorescence: 1:20-1:1000, Immunohistochemistry-Frozen: 1:20-1:1000, Immunoprecipitation: 1:20-1:1000
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	A peptide corresponding to the amino acids 20-37 TQETFPKYLHYDEETSH of human Osteoprotegerin was used as immunogen for this antibody.
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Protein G purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	tumor necrosis factor receptor superfamily member 11b
Database Link:	<a href="#">NP_002537</a> <a href="#">Entrez Gene 4982 Human</a> <a href="#">O00300</a>



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**Background:** Osteoprotegerin (OPG) is a secretory glycoprotein belonging to TNF receptor (TNFR) superfamily. As the name implies, it protects bone. Unlike other TNFRs it lacks a transmembrane domain and lacks any apparent cell associated signals. OPG consists of 401 amino acid with molecular mass of approximately 55 kD as a monomer and 110 kD as a disulfide-linked dimer. High levels of OPG mRNA has been detected in lung, heart, kidney, and placenta<sup>1</sup>. Recombinant OPG blocks osteoclastogenesis in vitro and increases bone density in vivo. Targeted deletion of OPG in mice results in severe early-onset of osteoporosis. These mice also exhibit increase in vascular calcification in the aorta and renal arteries suggesting that it may also play a role in degenerative arterial disease.

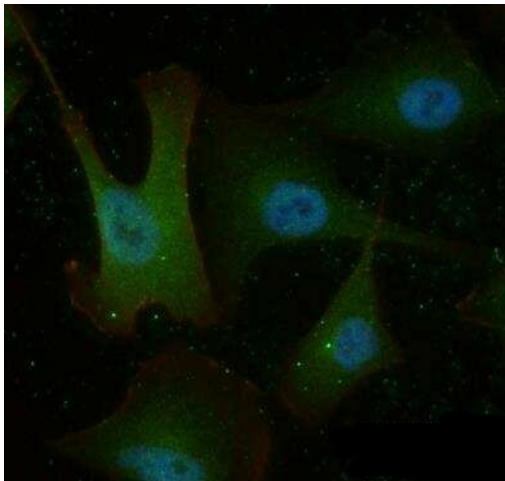
**Synonyms:** OCIF; OPG; TR1

**Note:** This antibody is useful in Flow Cytometry: 0.2-1 ug/10<sup>6</sup> cells  
Immunocytochemistry/Immunofluorescence: see Sandra 2006 Immunohistochemistry (frozen); see Boumans 2012 for details. Immunoprecipitation: see Sandra 2006

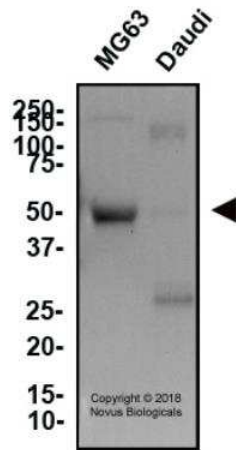
**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Cytokine-cytokine receptor interaction

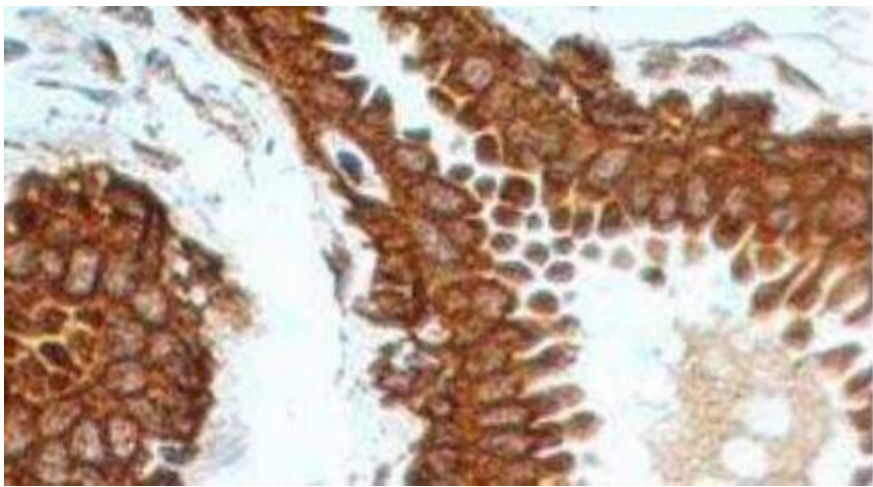
### Product images:



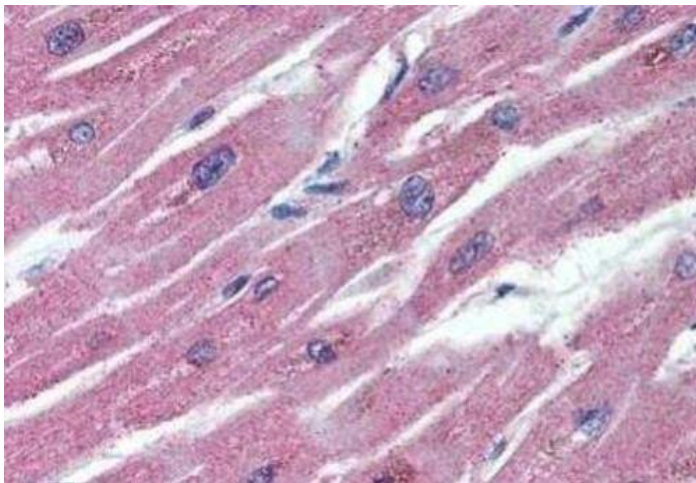
Immunocytochemistry/Immunofluorescence: Osteoprotegerin/TNFRSF11B Antibody (98A1071) TA336370 - MG-63 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti-Osteoprotegerin (98A1071) at 5 ug/ml overnight at 4C and detected with an anti-mouse DyLight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



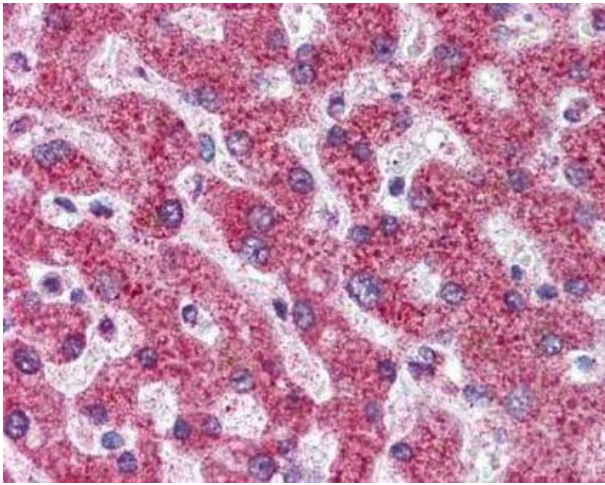
Western Blot: Osteoprotegerin/TNFRSF11B Antibody (98A1071) TA336370 - Total protein from human MG63 and Daudi cell lines was separated on a 7.5% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 1.0 ug/ml anti-Osteoprotegerin in blocking buffer and detected with an anti-mouse HRP secondary antibody using chemiluminescence.



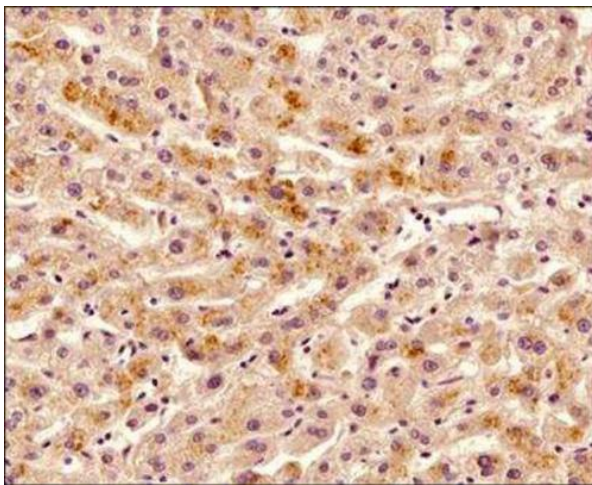
Immunohistochemistry-Paraffin: Osteoprotegerin/TNFRSF11B Antibody (98A1071) TA336370 - Human breast tissue stained with OPG antibody (5 ug/ml), peroxidase-conjugate and DAB chromogen.



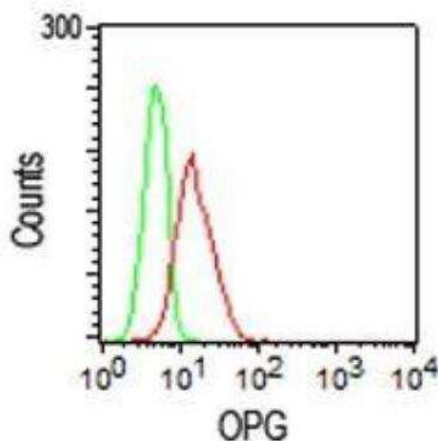
Immunohistochemistry-Paraffin: Osteoprotegerin/TNFRSF11B Antibody (98A1071) TA336370 - Staining of human heart tissue after heat-induced antigen retrieval. Antibody concentration 5 ug/ml.



Immunohistochemistry-Paraffin:  
Osteoprotegerin/TNFRSF11B Antibody (98A1071)  
TA336370 - Staining of human liver. Tissue after  
heat-induced antigen retrieval. Antibody  
concentration 5 ug/ml.



Immunohistochemistry-Paraffin:  
Osteoprotegerin/TNFRSF11B Antibody (98A1071)  
TA336370 - Human liver using 1:200 dilution of  
anti-Osteoprotegerin/TNFRSF11B antibody (clone  
98A1071). The staining was developed with HRP  
labeled secondary antibody and DAB reagent,  
and nuclei of cells were counter-stained with  
hematoxylin. This Osteoprotegerin antibody  
generated a diffused but weak cytoplasmic  
staining with a very specific and strong punctate  
signal at the periphery of the cells.



Flow Cytometry: Osteoprotegerin/TNFRSF11B  
Antibody (98A1071) TA336370 - Intracellular  
staining of  $10^6$  HeLa cells using 0.2 ug of OPG  
antibody, 0.5 ul of PE secondary.