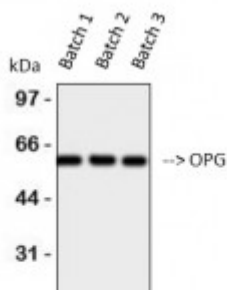


Anti-OPG antibody



Western Blot (WB) analysis of HeLa cell lysate using OPG Antibody (STJ94831) from 3 batches.



Description

OPG is a protein encoded by the TNFRSF11B gene which is approximately 46 kDa. OPG is secreted into the extracellular space. It is involved in the TNF superfamily pathway, PEDF induced signalling, osteoclast differentiation, the TRAF pathway and TNFR1 pathway. This protein falls under the TNF-receptor superfamily. It acts as decoy receptor for TNFSF11/RANKL and neutralizes its function in osteoclastogenesis. It inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. It may also play a role in preventing arterial calcification. OPG is highly expressed in multiple tissues including the adult lung, heart, kidney, liver and spleen, thymus. Mutations in the TNFRSF11B gene may result in Paget disease of the bone. STJ94831 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of OPG protein.

Model	STJ94831
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human OPG
Immunogen Region	10-90 aa, N-terminal
Gene ID	4982
Gene Symbol	TNFRSF11B
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	OPG Polyclonal Antibody detects endogenous levels of OPG protein.

Tissue Specificity	Highly expressed in adult lung, heart, kidney, liver, spleen, thymus, prostate, ovary, small intestine, thyroid, lymph node, trachea, adrenal gland, testis, and bone marrow. Detected at very low levels in brain, placenta and skeletal muscle. Highly expressed in fetal kidney, liver and lung.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Tumor necrosis factor receptor superfamily member 11B Osteoclastogenesis inhibitory factor Osteoprotegerin
Molecular Weight	55 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:11909OMIM:239000
Alternative Names	Tumor necrosis factor receptor superfamily member 11B Osteoclastogenesis inhibitory factor Osteoprotegerin
Function	Acts as decoy receptor for TNFSF11/RANKL and thereby neutralizes its function in osteoclastogenesis. Inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local ratio between TNFSF11 and TNFRSF11B. May also play a role in preventing arterial calcification. May act as decoy receptor for TNFSF10/TRAIL and protect against apoptosis. TNFSF10/TRAIL binding blocks the inhibition of osteoclastogenesis.
Cellular Localization	Secreted.
Post-translational Modifications	N-glycosylated. Contains sialic acid residues. The N-terminus is blocked.