

## Basic Information

<b>Product Name</b>	Anti-OPG/TNFRSF11B Antibody	
<b>Gene Name</b>	TNFRSF11B	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat, monkey	
<b>Tested Application</b>	WB, IHC, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Osteoprotegerin/TNFRSF11B recombinant protein (Position: Q247-R296).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	55 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

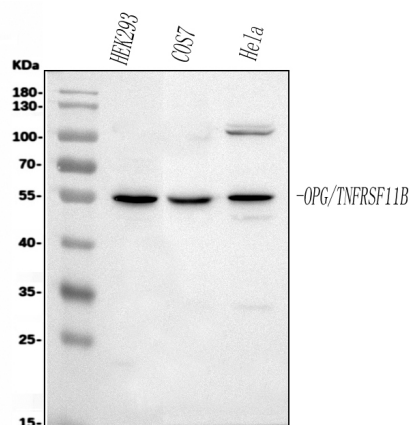
Tumor necrosis factor receptor superfamily member 11B (TNFRSF11B), also known as OPG, is a protein that in humans is encoded by the TNFRSF11B gene. OPG is a cytokine receptor, and a member of the tumor necrosis factor (TNF) receptor superfamily. By analysis of radiation hybrids, TNFRSF11B gene was mapped to chromosome 8q24. OPG is a decoy receptor for the receptor activator of nuclear factor kappa B ligand (RANKL). By binding RANKL, OPG inhibits nuclear kappa B (NF-κB) which is a central and rapid acting transcription factor for immune-related genes, and a key regulator of inflammation, innate immunity, and cell survival and differentiation. OPG binding to RANKL on

osteoblast/stromal cells, blocks the RANKL-RANK ligand interaction between osteoblast/stromal cells and osteoclast precursors.

## Reference

Anti-OPG/TNFRSF11B Antibody被引用在11文献中。

## Selected Validation Data



Western blot analysis of anti-OPG/TNFRSF11B antibody (A00863).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HEK293 whole cell lysates,

Lane 2: monkey COS-7 whole cell lysates,

Lane 3: human HeLa whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-OPG/TNFRSF11B

antigen affinity purified polyclonal antibody (A00863) and probed

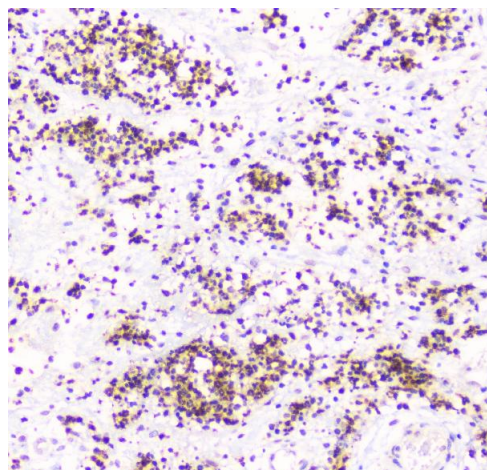
with a goat anti-rabbit IgG-HRP secondary antibody (Catalog #

BA1054). The signal is developed using ECL Plus Western Blotting

Substrate (Catalog # AR1197). A specific band was detected for

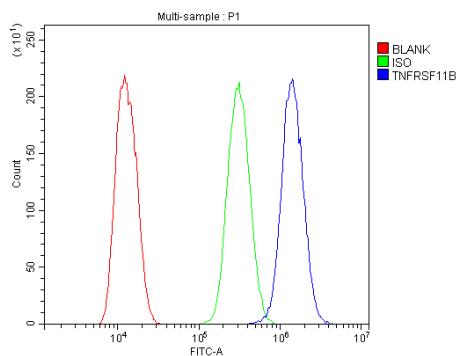
OPG/TNFRSF11B at approximately 55 kDa. The expected band size

for OPG/TNFRSF11B is at 46 kDa.



IHC analysis of OPG/TNFRSF11B using anti-OPG/TNFRSF11B antibody (A00863).

OPG/TNFRSF11B was detected in a paraffin-embedded section of human appendicitis tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-OPG/TNFRSF11B Antibody (A00863) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of U2OS cells using anti-OPG/TNFRSF11B antibody (A00863).

Overlay histogram showing U2OS cells stained with A00863 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-OPG/TNFRSF11B Antibody (A00863) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.