

## Anti-Osteopontin/SPP1 Antibody

Catalog Number: PA1432

### About Spp1

Osteopontin (OPN) also called urinary stone protein, secreted phosphoprotein 1 (SPP1), bone sialoprotein, and early T lymphocyte activation 1 (ETA1). Osteopontin is a phosphorylated glycoprotein secreted to the mineralizing extracellular matrix by osteoblasts during bone development. Osteopontin is presumably involved in stone formation as stone matrix. The deduced protein sequence reveals a 317-amino acid protein (34,982 Da) containing a 16-amino acid hydrophobic signal sequence and a 33,352-Da protein destined to undergo extensive post-translational modifications before being secreted from the cell. The gene is located on human chromosome 4. The standard product used in this kit is recombinant human OPN, consisting of 17-314 amino acid sequence with the molecular mass of 32.9KDa. As a result of glycosylation, the molecular mass is 60-65KDa.

### Overview

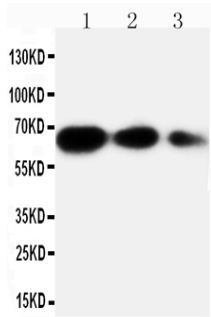
Product Name	Anti-Osteopontin/SPP1 Antibody
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Osteopontin/SPP1 Antibody catalog # PA1432. Tested in IHC, WB applications. This antibody reacts with Mouse, Rat.
Conjugate	FITC
Application	IHC, WB
Clonality	Monoclonal BAM-10
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg NaN <sub>3</sub> .
Storage Instructions	The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.
Host	Hamster
Uniprot ID	P10923

### Technical Details

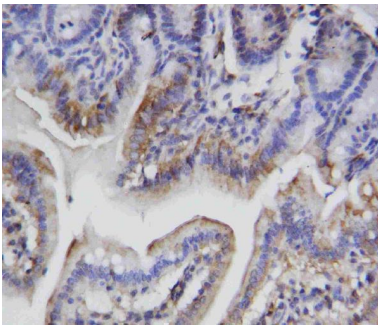
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse SPP1, identical to the related rat sequence.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross reactivity with other proteins

Form	Lyophilized
Concentration	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Purification	Immunogen Affinity Purified
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Rat, Mouse, By Heat Western blot, 0.1-0.5ug/ml, Mouse, Rat

## Anti-Osteopontin/SPP1 Antibody (PA1432) Images



Anti-Osteopontin antibody, PA1432, Western blotting  
Lane 1: Recombinant Mouse OPN Protein 10ng  
Lane 2: Recombinant Mouse OPN Protein 5ng  
Lane 3: Recombinant Mouse OPN Protein 2.5ng



Anti-Osteopontin antibody, PA1432, IHC(P)  
IHC(P): Rat Intestine Tissue

## 3 Publications Citing This Product

1. PubMed ID: 10.1038/s41418-018-0240-2, Long noncoding RNA lncAIS downregulation in mesenchymal stem cells is implicated in the pathogenesis of adolescent idiopathic scoliosis
2. PubMed ID: 28567512, Zhou, J., Jin, J., Li, X., Zhao, Z., Zhang, L., Wang, Q.,..., & Xiang, S. (2017). Total flavonoids of *Desmodium styracifolium* attenuates the formation of hydroxy-l-proline-induced calcium oxalate urolithiasis in rats. *Urolithiasis*. Advance online pu...
3. PubMed ID: 23151010, Shan A, Zhou C, He Y, Feng W, Chen G, Zhong G. *Ren Fail*. 2013;35(1):37-42. Doi: 10.3109/0886022X.2012.741645. Epub 2012 Nov 14. Expression Of Both Matrix Metalloproteinase-2 And Its Tissue Inhibitor-2 In Tunica Media Of Radial Artery In Uremic Pat...

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