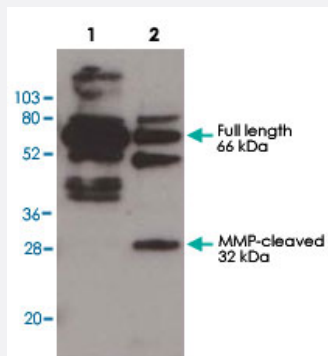


SPP1 polyclonal antibody

Catalog # PAB10297 Size 200 uL

Applications



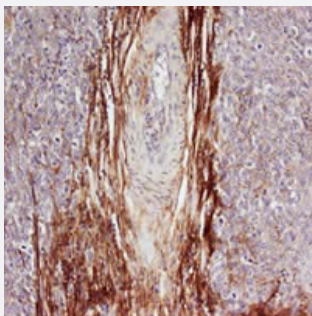
Western Blot (Recombinant protein)

Immunoblotting of SPP1 polyclonal antibody (Cat # PAB10297) was used at a 1:1,000 dilution to detect SPP1 by Western blot.

In lane 1, reactivity is shown against 250 ng of human SPP1.

Lane 2 shows reactivity of MMP-cleaved SPP1.

Use a 1 : 10,000 dilution of HRP conjugated Gt-a-Rabbit IgG for detection.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of SPP1 polyclonal antibody (Cat # PAB10297) was used at a 1 : 100-1 : 300 dilution to detect SPP1 by immunohistochemistry. SPP1 is a normal component of elastic fibers in the breast (shown heavily stained in this section of human breast tumor cells).

There is also weak staining of the extracellular matrix.

SPP1 is not expressed in breast tumor cells, and there is no staining of the breast cells in this section.

No antigen retrieval is required.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of SPP1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to human SPP1.
Host	Rabbit
Theoretical MW (kDa)	66, 32
Reactivity	Dog, Human, Pig

Specificity	This antibody recognizes the full-length osteopontin protein (which runs at 66 KDa on westerns), as well as the C-terminal fragments of both thrombin and MMP-cleaved OPN. The 32 KDa MMP-cleaved C-fragment is recognized, but not the 40 KDa N-terminal fragment.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:20000-1:100000) Western Blot (1:500-1:2000) Immunohistochemistry (1:100-1:300) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Recombinant protein)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — SPP1

Entrez GeneID [6696](#)

Gene Name SPP1

Gene Alias	BNSP, BSPI, ETA-1, MGC110940, OPN
Gene Description	secreted phosphoprotein 1
Omim ID	166490
Gene Ontology	Hyperlink
Gene Summary	bone sialoprotein I
Other Designations	SPP1/CALPHA1 fusion bone sialoprotein I early T-lymphocyte activation 1 osteopontin osteopontin/immunoglobulin alpha 1 heavy chain constant region fusion protein secreted phosphoprotein 1 (osteopontin, bone sialoprotein I, early T-lymphocyte activation 1)

Publication Reference

- [The immunology of Eta-1/osteopontin.](#)

Weber GF, Cantor H.

Cytokine & Growth Factor Reviews 1996 Oct; 7(3):241.

Application: ELISA, IHC, WB-Ce, WB-Ti, Human, Rat, B lymphocytes, Hearts, Lungs, Macrophages, Monocytes, Natural killer cells, Skeletal muscles, Skin, T lymphocytes

- [Osteopontin-induced modifications of cellular functions.](#)

Denhardt DT, Lopez CA, Rollo EE, Hwang SM, An XR, Walther SE.

Annals of the New York Academy of Sciences 1995 Apr; 56(6):1367.

Application: WB-Re, N/A, Recombinant protein

- [Overcoming obstacles to metastasis--defenses against host defenses: osteopontin \(OPN\) as a shield against attack by cytotoxic host cells.](#)

Denhardt DT, Chambers AF.

Journal of Cellular Biochemistry 1994 Sep; 56(1):48.

Application: ELISA, Human, Mouse, Cancer cells, Human plasma, HUVECs, Macrophages, NIH/3T3 cells

Pathway

- [ECM-receptor interaction](#)
- [Focal adhesion](#)
- [Toll-like receptor signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Amyotrophic lateral sclerosis](#)
- [Anoxia](#)
- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Brain Infarction](#)
- [Brain Ischemia](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery Diseases](#)
- [Cerebrovascular Disorders](#)
- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Coronary Artery Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Edema](#)
- [Esophageal Neoplasms](#)

- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Inflammation](#)
- [Kidney Calculi](#)
- [Kidney Failure](#)
- [Lewy Body Disease](#)
- [Liver Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Metabolic Syndrome X](#)
- [Multiple Sclerosis](#)
- [Myocardial Infarction](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Nephrolithiasis](#)
- [Osteoporosis](#)
- [Ovarian Neoplasms](#)
- [Periodontitis](#)
- [Pseudoxanthoma Elasticum](#)
- [Sarcoidosis](#)

- [Stroke](#)
- [Urinary Calculi](#)
- [Urolithiasis](#)