

Rabbit Osteopontin Monoclonal Antibody | anti-Spp1 antibody

Recombinant Anti-Osteopontin Antibody, Rabbit Monoclonal

CATALOG # AAA27731	HOST Rabbit	APPLICATIONS ELISA, Immunohistochemistry, Flow Cytometry, Functional Assay
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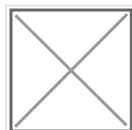
PRODUCT SYNONYMS

Osteopontin; Monoclonal Antibody; Recombinant Anti-Osteopontin Antibody; Rabbit Monoclonal; Osteopontin/SPP1/ETA-1 Antibody; Rabbit MAb; secreted phosphoprotein 1; Anti-BNSP Antibody; Anti-BSPI Antibody; Anti-ETA-1 Antibody; Anti-OPN Antibody; anti-Spp1 antibody

PRODUCT SPECIFICATIONS

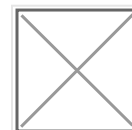
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	001
Specificity	Human Osteopontin/SPP1/ETA-1
Form/Format	0.2um filtered solution in PBS
Applicable Applications for anti-Spp1 antibody	ELISA, IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Application Notes	IHC-P: 1:1000-1:4000 FC: 1:25-1:100 ELISA: 1:5000-1:10000 This antibody can be used at 1:5000-1:10000 with the appropriate secondary reagents to detect Human SPP1. Optimal concentrations/dilutions should be determined by the end user.
Immunogen	Recombinant Human Osteopontin/SPP1/ETA-1 protein
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Human Osteopontin/SPP1/ETA-1 (rh Osteopontin/SPP1/ETA-1).
Preparation and Storage	This antibody can be stored at 2-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Immunochemical staining of human SPP1 in human hepatoma with rabbit monoclonal antibody (1:2000, formalin-fixed paraffin embedded sections).



IHC (Immunohistochemistry)

Immunochemical staining of human SPP1 in human kidney with rabbit monoclonal antibody (1:2000, formalin-fixed paraffin embedded sections).



FCM (Flow Cytometry)

Flow cytometric analysis of purified anti-human Spp1 on U937 cells. U937 cells were treated according to manufacturer's manual (BD Pharmingen[®]), and stained with Purified Rabbit anti-Spp1 (Bold line hisgram), To demonstrate specificity of staining the binding of anti-human Spp1 (10352-R001) was blocked by the preincubation of the purified antibody with molar excess of recombinant human Spp1 (5 ug.) for 1 hour (dashed line hisgram), then stained with a FITC-conjugated second step antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-Spp1 antibody	Osteopontin, also known as Secreted phosphoprotein 1, Bone sialoprotein 1, BSP-1, OPN, and SPP1, is a member of the osteopontin family and a SIBLING glycoprotein. Osteopontin has been classified as T-helper 1 cytokine and thus believed to exacerbate inflammation in several chronic inflammatory diseases, including atherosclerosis. Besides proinflammatory functions, physiologically Osteopontin is a potent inhibitor of mineralization, it prevents ectopic calcium deposits and is a potent inducible inhibitor of vascular calcification. Osteopontin is expressed and secreted by various cells, and has a role in cell adhesion, chemotaxis, prevention of apoptosis, invasion, migration and anchorage-independent growth of tumor cells. Osteopontin recruitment functions of inflammatory cells are thought to be mediated through its adhesive domains, especially the arginine-glycine-aspartate (RGD) sequence that interacts with several integrin heterodimers. Osteopontin has emerged as a potential biomarker and mediator in cardiovascular disease. In the context of atherosclerosis, OPN is generally regarded as a proinflammatory and proatherogenic molecule. However, the role of OPN in vascular calcification (VC), which is closely related to chronic and active inflammation, is that of a negative regulator because it is an inhibitor of calcification and an active inducer of decalcification. Extensive research has demonstrated the pivotal participation of Osteopontin in the regulation of cell signaling which controls neoplastic and malignant transformation. The elevated expression of Osteopontin has been observed in a variety of cancers. It has been linked with tumor metastasis and signifies a poor prognosis for the patient.
References	Scatena M, et al. (2007) Osteopontin: a multifunctional molecule regulating chronic inflammation and vascular disease. Arterioscler Thromb Vasc Biol. 27(11): 2302-9. Johnston NI, et al. (2008) Osteopontin as a target for cancer therapy. Front Biosci. 13: 4361-72. Cho HJ, et al. (2009) Osteopontin: a multifunctional protein at the crossroads of inflammation, atherosclerosis, and vascular calcification. Curr Atheroscler Rep. 11(3): 206-13. Waller AH, et al. (2010) Osteopontin in cardiovascular disease: a potential therapeutic target. Cardiol Rev. 18(3): 125-31. Shevde LA, et al. (2010) Osteopontin: an effector and an effect of tumor metastasis. Curr Mol Med. 10(1): 71-81.

NCBI AND UNIPROT INFORMATION

NCBI GI #	91206462
NCBI GeneID	6696
NCBI Accession #	NP_001035147.1
NCBI GenBank Nucleotide #	NM_001040058.1
UniProt Accession #	P10451; Q15681; Q15682; Q15683; Q8NBK2; Q96IZ1; Q3LGB0; Q4W597; Q567T5
NCBI Official Full Name	osteopontin isoform a
NCBI Official Synonym Full Names	secreted phosphoprotein 1
NCBI Official Symbol	SPP1
NCBI Official Synonym Symbols	OPN; BNSP; BSPI; ETA-1; MGC110940
NCBI Protein Information	osteopontin; SPP-1; uropontin; nephropontin; osteopontin-C; OTTHUMP00000161173; OTTHUMP00000161174; OTTHUMP00000218555; OTTHUMP00000218556; SPP1/CALPHA1 fusion; bone sialoprotein 1; bone sialoprotein I; urinary stone protein; early T-lymphocyte activation
UniProt Protein Name	Osteopontin
UniProt Gene Name	SPP1

UniProt Synonym Gene Names	BNSP; OPN; SPP-1
UniProt Entry Name	OSTP_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/osteopontin-antibody-clone-001-immunohistochemistry-flow-cytometry-elisa/27731>