10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Osteopontin Antibody

Catalog # AP51532

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P10451
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35423

Additional Information

Gene ID	6696
Other Names	BNSP; OPN; Osteopontin; Bone sialoprotein 1; Nephropontin; Secreted phosphoprotein 1; SPP-1; Urinary stone protein; Uropontin
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Osteopontin. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

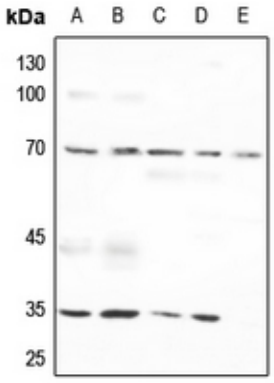
Protein Information

Name	SPP1
Synonyms	BNSP, OPN
Function	Major non-collagenous bone protein that binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to cell-matrix interaction.
Cellular Location	Secreted
Tissue Location	Detected in cerebrospinal fluid and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717) Bone. Found in plasma.

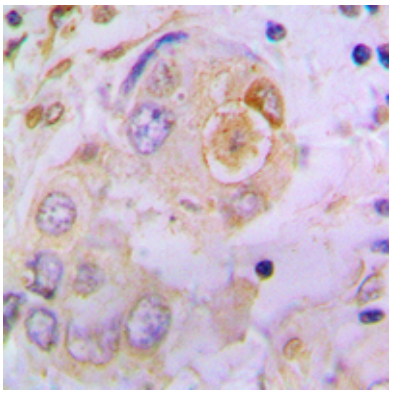
References

Kiefer M.C.,et al.Nucleic Acids Res. 17:3306-3306(1989).
Young M.F.,et al.Genomics 7:491-502(1990).
Shiraga H.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:426-430(1992).
Crosby A.H.,et al.Genomics 27:155-160(1995).
Hijiya N.,et al.Biochem. J. 303:255-262(1994).

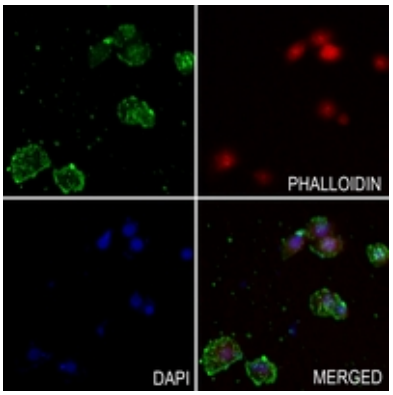
Images



Western blot analysis of Osteopontin expression in Hela (A), HGC27 (B), mouse kidney (C), mouse lung (D), rat lung (E) whole cell lysates. (Predicted band size: 35 kD; Observed band size: 35; 70 kD)



Immunohistochemical analysis of Osteopontin staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Osteopontin staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.