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Osteopontin Rabbit pAb

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Catalog # AP94167

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P08721
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34963
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from rat osteopontin
Epitope Specificity	201-314/314
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
SIMILARITY	Belongs to the osteopontin family.
SUBUNIT	Ligand for integrin alpha-V/beta-3.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Osteopontin is the principal phosphorylated glycoprotein of bone and is expressed in a limited number of other tissues including dentine. Osteopontin is produced by osteoblasts under stimulation by calcitriol and binds tightly to hydroxyapatite. It is also involved in the anchoring of osteoclasts to the mineral of bone matrix via the vitronectin receptor, which has specificity for osteopontin. Osteopontin is overexpressed in a variety of cancers, including lung, breast, colorectal, stomach, ovarian, melanoma and mesothelioma.

Additional Information

Gene ID	25353
Other Names	Osteopontin, Bone sialoprotein 1, Secreted phosphoprotein 1, SPP-1, Spp1, 2b7, Spp-1
Target/Specificity	Bone. Found in plasma.
Dilution	WB=1:500-2000,IHC-P=1:500-2000,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Spp1
Synonyms	2b7, Spp-1
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 {ECO:0000250|UniProtKB:P10451}.

Background

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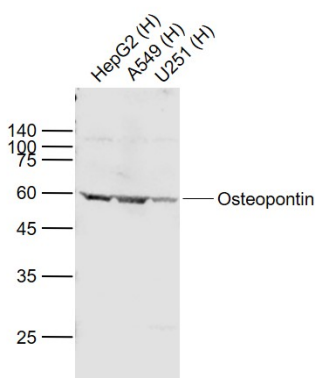
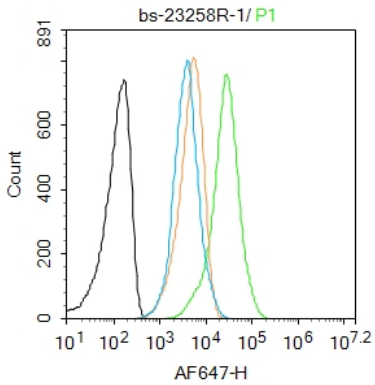
Images

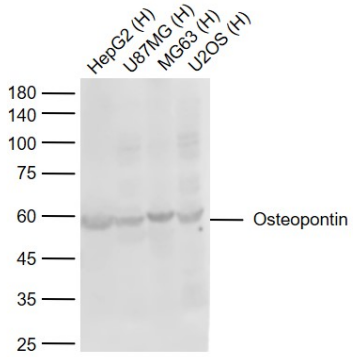


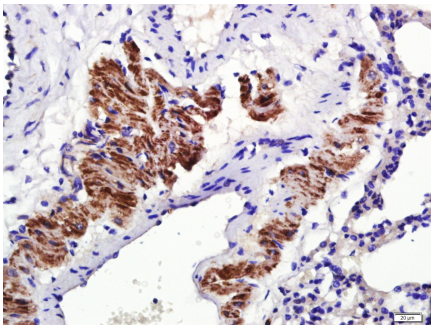
Sample: Lane 1: HepG2 (Human) Cell Lysate at 30 ug Lane 2: A549 (Human) Cell Lysate at 30 ug Lane 3: U251 (Human) Cell Lysate at 30 ug Primary: Anti-Osteopontin (AP94167) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 60-65 kD Observed band size: 60 kD



Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-Osteopontin antibody (AP94167) Dilution: 1 µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: 1 µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Lane 1: Human HepG2 cell lysates Lane 2: Human U87MG cell lysates Lane 3: Human MG63 cell lysates Lane 4: Human U2OS Cell Lysates Primary: Anti-Osteopontin (AP94167) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 60 kDa Observed band size: 60 kDa





Paraformaldehyde-fixed, paraffin embedded (Rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (osteopontin) Polyclonal Antibody, Unconjugated (AP94167) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.