

Anti-OPN Antibody

Catalog # ABO10753

Product Information

Application	WB, IHC-P
Primary Accession	P10451
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Osteopontin(SPP1) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6696
Other Names	Osteopontin, Bone sialoprotein 1, Nephropontin, Secreted phosphoprotein 1, SPP-1, Urinary stone protein, Uropontin, SPP1, BNSP, OPN
Calculated MW	35423
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human
Subcellular Localization	Secreted.
Tissue Specificity	Bone. Found in plasma.
Source	Eukaryota
Protein Name	Osteopontin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ N.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Osteopontin(28-47aa EEKQLYNKYPDAVATWLNPD), different from the related mouse sequence by six amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the osteopontin family.

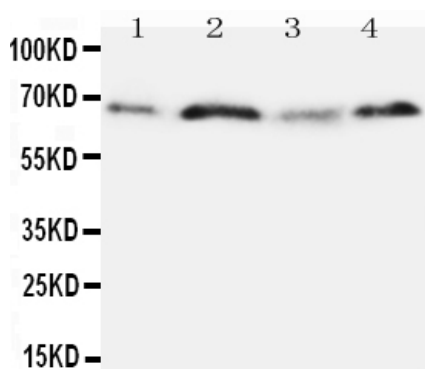
Protein Information

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.

Background

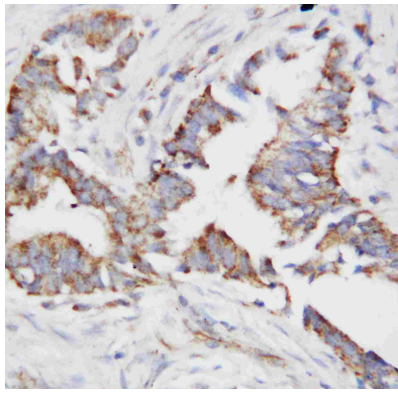
Osteopontin(OPN) also called urinary stone protein, secreted phosphoprotein 1(SPP1), bone sialoprotein, and early T lymphocyte activation 1(ETA1). Osteopontin is a phosphorylated glycoprotein secreted to the mineralizing extracellular matrix by osteoblasts during bone development. Osteopontin is presumably 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.

Images



Anti-Osteopontin antibody, ABO10753, Western blotting
Lane 1: MM231 Cell Lysate
Lane 2: HELA Cell Lysate
Lane 3: JURKAT Cell Lysate
Lane 4: COLO320 Cell Lysate

Anti-Osteopontin antibody, ABO10753, IHC(P)
Human Mammary Cancer Tissue



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