

Anti-OPN Antibody

Catalog # ABO12758

Product Information

Application	WB, E
Primary Accession	P10451
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Osteopontin(SPP1) detection. Tested with WB, ELISA in Human;Mouse;Rat.
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	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat, - ELISA , 0.1-0.5 µg/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 Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Osteopontin (281-314aa HEDMLVDPKSKEEDKHLKFRISHELDSASSEVN), different from the related mouse sequence by eight amino acids, and from the related rat sequence by seven amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also

Sequence Similarities

be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Belongs to the osteopontin family.

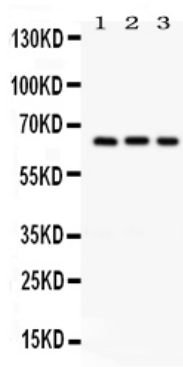
Protein Information

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 known as secreted phosphoprotein 1 (SPP1), is a protein that in humans is encoded by the SPP1 gene (secreted phosphoprotein 1). The protein encoded by this gene is involved in the attachment of osteoclasts to the mineralized bone matrix. And the encoded protein is secreted and binds hydroxyapatite with high affinity. The osteoclast vitronectin receptor is found in the cell membrane and may be involved in the binding to this protein. Also, this protein is a cytokine that upregulates expression of interferon-gamma and interleukin-12. Several transcript variants encoding different isoforms have been found for this gene.

Images



Anti- Osteopontin antibody, ABO12758, Western blotting
All lanes: Anti Osteopontin (ABO12758) at 0.5ug/ml
Lane 1: Mouse Pancreas Tissue Lysate at 50ug
Lane 2: JURKAT Whole Cell Lysate at 40ug
Lane 3: HEPG2 Whole Cell Lysate at 40ug
Predicted bind size: 66KD
Observed bind size: 66KD

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