

ARG55186 anti-OPN / Osteopontin antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes OPN / Osteopontin
Tested Reactivity	Hu, Ms, Rat
Tested Application	ELISA, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	OPN / Osteopontin
Species	Human
Immunogen	Synthetic peptide (18 aa) within aa. 50-100 of Human OPN / Osteopontin.
Conjugation	Un-conjugated
Alternate Names	BSP1; ETA-1; Uropontin; Osteopontin; Nephropontin; SPP-1; Bone sialoprotein 1; BNSP; Urinary stone protein; OPN; Secreted phosphoprotein 1

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-P	Assay-dependent
	WB	1 - 2 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human Bladder Tissue Lysate	

Properties

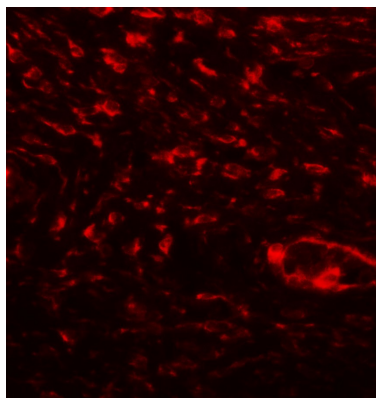
Form	Liquid
Purification	Protein A purified.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

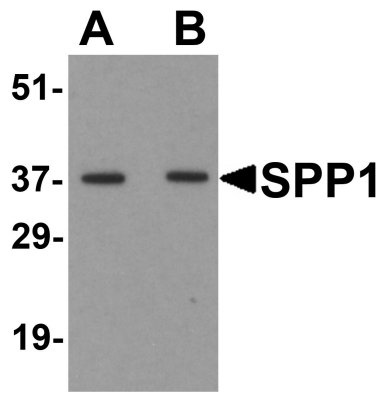
Database links	GeneID: 20750 Mouse GeneID: 6696 Human Swiss-port # P10451 Human Swiss-port # P10923 Mouse
Gene Symbol	SPP1
Gene Full Name	secreted phosphoprotein 1
Background	The secreted protein 1 (SPP1), also known as osteopontin, is a major noncollagenous protein of bone, but is also found in the extracellular matrix of other mineralized tissues and in bodily fluids. In bone, SPP1 is produced by osteoblasts, osteocytes, macrophages, and osteoclasts. SPP1 binds to cells through integrin and non-integrin receptors, as well as the adhesion receptor CD44 in an RGD-independent manner, enabling SPP1 to induce a number of functional effects including macrophage chemotaxis, cytoprotection, and regulation of T helper type 1 cells. SPP1 can regulate biomineralization by inhibiting the formation of hydroxyapatite and the growth of calcium oxalate crystals.
Function	Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to cell-matrix interaction. Acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type I immunity. [UniProt]
Highlight	Related products: OPN antibodies ; OPN ELISA Kits ; Anti-Rabbit IgG secondary antibodies ; Related news: The role of HDGF in tumor angiogenesis
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody; Signaling Transduction antibody
Calculated Mw	35 kDa
PTM	Extensively phosphorylated by FAM20C in the extracellular medium at multiple sites within the S-x-E/pS motif. N- and O-glycosylated. Isoform 5 is GalNAc O-glycosylated at Thr-59 or Ser-62.

Images



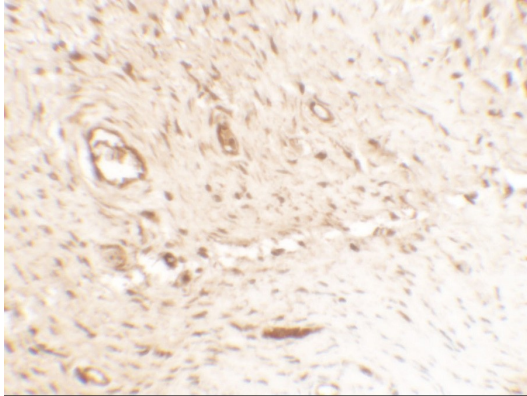
ARG55186 anti-OPN / Osteopontin antibody IHC image

Immunohistochemistry: SPP1 in Human bladder tissue stained with ARG55186 anti-OPN / Osteopontin antibody at 20 ug/ml dilution.



ARG55186 anti-OPN / Osteopontin antibody WB image

Western blot: Human bladder tissue lysate stained with ARG55186 anti-OPN / Osteopontin antibody at (A) 1 and (B) 2 ug/ml dilution.



ARG55186 anti-OPN / Osteopontin antibody IHC image

Immunohistochemistry: Human bladder tissue stained with ARG55186 anti-OPN / Osteopontin antibody at 5 ug/ml dilution.