

For Research Use Only

Osteopontin Polyclonal antibody



Catalog Number: 25715-1-AP

10 Publications

Basic Information

Catalog Number: 25715-1-AP	GenBank Accession Number: BC007016	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 400 µg/ml by Nanodrop and 280 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6696	Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500
Source: Rabbit	Full Name: secreted phosphoprotein 1	
Isotype: IgG	Calculated MW: 314 aa, 35 kDa	
Immunogen Catalog Number: AG22588	Observed MW: 66 kDa	

Applications

Tested Applications:

IHC, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse kidney tissue, rat kidney tissue, HEK-293, C2C12 cells

IHC : human stomach cancer tissue, human kidney tissue, human small intestine tissue

Background Information

Osteopontin (OPN), also known as SPP1, is a secreted glycoposphoprotein that belongs to the small integrin-binding ligand N-linked glycoprotein (SIBLING) family. Originally isolated from bone, OPN has been found in kidney, vascular tissues, biological fluids, and various tumor tissues (PMID: 15138464; 16406521). OPN can interact with CD44 and integrins and regulate diverse biological processes. It has a multifaceted role in bone development and remodeling, and is also involved in the inflammatory and immune response, oncogenesis and cancer progression. The very acidic nature of OPN, as well as the presence of variable posttranslational modifications, has led to anomalous migration in SDS-polyacrylamide gels and therefore to reports of different molecular weights for OPN (PMID: 8293561). Depending on the cell and tissue source and/or the SDS-PAGE system, OPN migrates with a molecular weight of 44-80 kDa, as well as at some smaller bands correspond to peptide fragments (PMID: 8195113; 17890765).

Notable Publications

Author	Pubmed ID	Journal	Application
Christian Stern	31561491	Int J Mol Sci	WB
Xiaopei Wu	33449642	ACS Biomater Sci Eng	WB, IHC
Xiaopei Wu	33129127	J Inorg Biochem	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

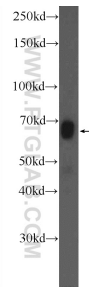
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

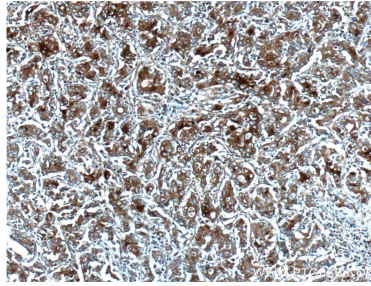
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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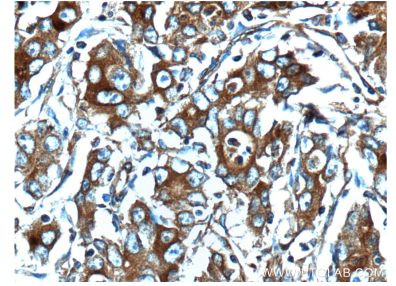
Selected Validation Data



mouse kidney tissue were subjected to SDS PAGE followed by western blot with 25715-1-AP (Osteopontin antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 25715-1-AP (Osteopontin antibody at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 25715-1-AP (Osteopontin antibody at dilution of 1:200 (under 40x lens).