

For Research Use Only

# Osteopontin Polyclonal antibody

Catalog Number: 25715-1-AP

14 Publications



## Basic Information

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

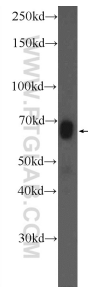
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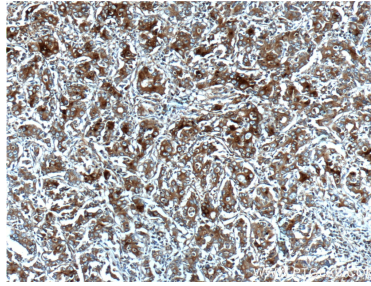
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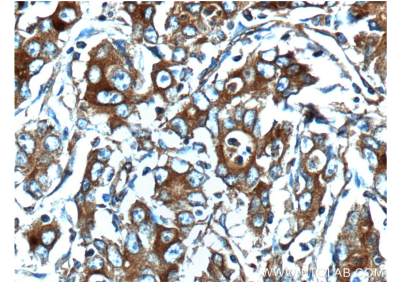
## Selected Validation Data



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).