## For Research Use Only

# Periostin Monoclonal antibody

Catalog Number:66491-1-lg Featured Product

27 Publications

BC106710

10631

Q15063

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:



### **Basic Information**

Catalog Number: 66491-1-lg Source: Mouse Isotype:

lgG1

Immunogen Catalog Number:

AG14487

periostin, osteoblast specific factor Calculated MW:

GenBank Accession Number:

93 kDa Observed MW: 85-90 kDa

**Purification Method:** 

Protein G purification

CloneNo.: 1A11A3

Recommended Dilutions:

WB: 1:5000-1:50000 IHC: 1:4000-1:16000 IF-P: 1:4000-1:16000 IF-Fro: 1:200-1:800

# **Applications**

**Tested Applications:** WB, IHC, IF-P, IF-Fro, ELISA

Cited Applications: WB, IHC, IF, ELISA 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: SK-N-SH cells, BxPC-3 cells, HEK-293 cells, human placenta tissue, MCF-7 cells, Neuro-2a cells, SGC-7901 cells, ROS1728 cells, BT-549 cells

IHC: human breast cancer tissue, human colon tissue. human colon cancer tissue, human stomach tissue

IF-P: human breast cancer tissue, IF-Fro: mouse breast cancer,

# **Background Information**

Periostin (POSTN, PN), originally named as osteoblast-specific factor 2 (OSF-2), is a 90-kDa secreted protein which is now classified as a matricellular protein. It is present in a wide variety of normal adult tissues and fetal tissues, and has a role in bone, tooth and heart development and function. Studies show that periostin is overexpressed in a broad range of human cancer types, including lung, ovary, breast and colon cancers. Recent evidence reveals that periostin is expressed by fibroblasts in the normal tissue and in the stroma of the primary tumour, and it is required to allow cancer stem cell maintenance. The isoforms of periostin are between 83 and 93 kDa in mass and differ in their C-terminal sequences, characterized by individual presence or absence of cassette exons 17-21 (UniProtKB/Swiss-Prot, PMID: 21997759).

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Lindsay B Alcaraz	36346290	Int J Cancer	IF
Jinna Wu	35619555	Mol Ther	WB,IHC
Jinsheng Li	35907353	Colloids Surf B Biointerfaces	IF

# Storage

Storage:

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

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

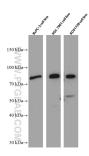
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

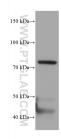
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

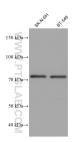
### Selected Validation Data



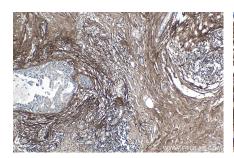
BxPC-3, SGC-7901 and ROS1728 cells were subjected to SDS PAGE followed by western blot with 66491-1-Ig (Periostin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



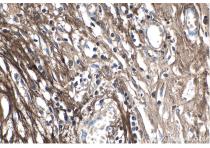
MCF-7 cells were subjected to SDS PAGE followed by western blot with 66491-1-1g (Periostin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



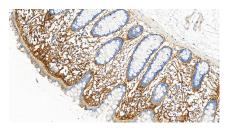
Various lysates were subjected to SDS PAGE followed by western blot with 66491-1-1g (Periostin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



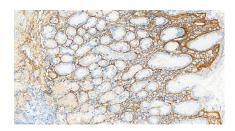
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66491-1-1g (Periostin antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



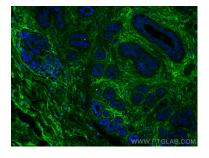
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66491-1-lg (Periostin antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



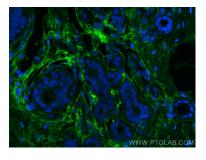
Immunohistochemical analysis of paraffinembedded human colon tissue slide using 66491-1-1g (Periostin antibody) at dilution of 1:8000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



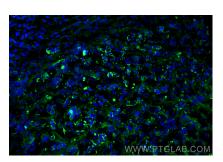
Immunohistochemical analysis of paraffinembedded human stomach tissue slide using 66491-1-Ig (Periostin antibody) at dilution of 1:8000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Periostin antibody (66491-1-lg, Clone: 1A11A3) at dilution of 1:8000 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Periostin antibody (66491-1-lg, Clone: 1A11A3) at dilution of 1:8000 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of un-fixed frozen OCT-embedded mouse breast cancer using Periostin antibody (66491-1-Ig, Clone: 1A11A3) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).