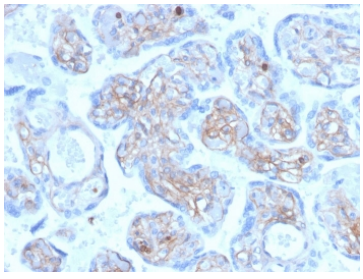
Periostin Antibody for IHC / POSTN [clone POSTN/3501] (V8696)

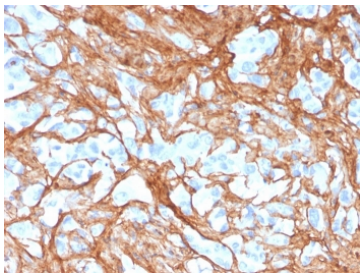
Catalog No.	Formulation	Size
V8696-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8696-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8696SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

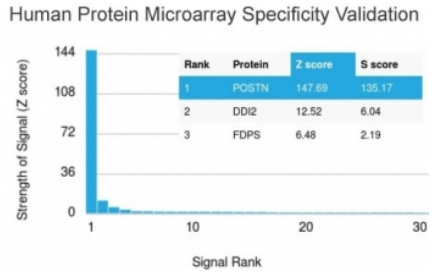
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	POSTN/3501
Purity	Protein G affinity chromatography
UniProt	Q15063
Localization	Secreted, cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This Periostin antibody is available for research use only.



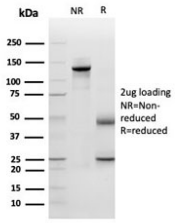
Immunohistochemistry of Periostin antibody for IHC in human placenta. Formalin-fixed, paraffin-embedded human placenta was stained with mouse monoclonal Periostin antibody (clone POSTN/3501) following heat-induced epitope retrieval by boiling in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes and cooling prior to testing. HRP-DAB brown chromogenic signal is observed predominantly in stromal and extracellular matrix regions within chorionic villi, consistent with the secreted and matrix-associated localization of Periostin, while trophoblastic nuclei remain largely negative.



Immunohistochemistry of Periostin antibody for IHC in human colon carcinoma. Formalin-fixed, paraffin-embedded human colon carcinoma tissue was stained with mouse monoclonal Periostin antibody (clone POSTN/3501) following heat-induced epitope retrieval by boiling in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes and cooling prior to testing. HRP-DAB brown chromogenic signal highlights abundant stromal and extracellular matrix regions surrounding malignant glands, consistent with the secreted and matrix-associated localization of Periostin, while tumor cell nuclei remain largely negative.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Periostin antibody (clone POSTN/3501). These results demonstrate the foremost specificity of the POSTN/3501 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Periostin antibody (clone POSTN/3501) as confirmation of integrity and purity.

Description

Periostin antibody recognizes Periostin, a secreted extracellular matrix protein encoded by the POSTN gene and also known as osteoblast specific factor 2. Periostin Antibody for IHC (clone POSTN/3501) is a mouse monoclonal antibody developed for immunohistochemical detection of this matricellular protein in formalin-fixed, paraffin-embedded tissues. Periostin is synthesized with a signal peptide and secreted into the extracellular space, where it integrates into the interstitial matrix and basement membrane to regulate cell adhesion, migration, and tissue remodeling.

Periostin antibody, also referred to as POSTN antibody and OSF-2 antibody, targets a member of the fasciclin family characterized by an N-terminal EMI domain and four tandem fasciclin-like domains. These domains enable binding to integrins such as alpha v beta 3 and alpha v beta 5, as well as to extracellular matrix components including collagen type I and fibronectin. Through these interactions, Periostin supports fibroblast activation, cytoskeletal organization, and collagen fibrillogenesis, particularly in tissues subjected to mechanical stress.

POSTN expression is enriched in periosteum, periodontal ligament, cardiac valves, and fibrous connective tissues. During development and wound repair, Periostin is upregulated to promote extracellular matrix deposition and structural stabilization. In cardiovascular biology, it contributes to valvular morphogenesis and adaptive remodeling. Increased expression of Periostin has also been associated with fibrotic conditions, where persistent matrix production contributes to tissue stiffening and dysfunction.

In oncology research, Periostin is frequently detected within tumor-associated stroma rather than malignant epithelial cells. Elevated POSTN expression has been reported in breast, lung, colorectal, pancreatic, and ovarian cancers, where it is commonly localized to cancer-associated fibroblasts and peritumoral connective tissue. This stromal distribution pattern makes Periostin antibody useful for studying tumor microenvironment biology and epithelial-mesenchymal interactions in

IHC-based tissue analyses.

The mouse monoclonal clone POSTN/3501 is optimized for IHC applications, enabling visualization of Periostin expression patterns in normal and diseased tissues for research use at NSJ Bioreagents.

Application Notes

Optimal dilution of the Periostin antibody for IHC should be determined by the researcher.

Immunogen

Recombinant full-length human CEA protein was used as the immunogen for the Periostin antibody.

Storage

Store the Periostin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).