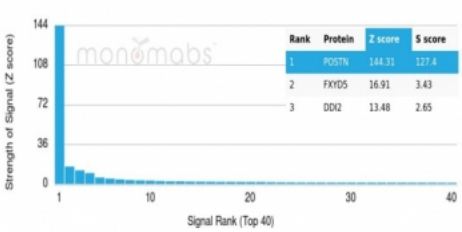
Periostin Antibody Microarray Validated / POSTN [clone POSTN/3502] (V4321)

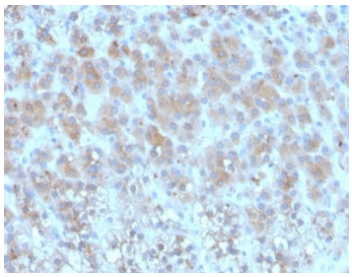
Catalog No.	Formulation	Size
V4321-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4321-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4321SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	POSTN/3502
Purity	Protein A/G affinity
UniProt	Q15063
Localization	Secreted, Cytoplasm
Applications	ELISA (Order BSA-free Format For Coating) : Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Periostin antibody is available for research use only.



HuProt microarray analysis of Periostin antibody (clone POSTN/3502). The antibody was screened against a HuProt array containing more than 19,000 full-length human proteins. Signal intensity is reported as a Z-score, representing the number of standard deviations above the mean signal of all proteins on the array generated by binding of the monoclonal antibody together with a fluorescently labeled anti-IgG secondary antibody. Proteins are ranked in descending order of Z-score, and the S-score reflects the difference in Z-score between the top-ranked protein and the next highest signal, providing a measure of relative target specificity. Clone POSTN/3502 demonstrates a strong Z-score for POSTN with an S-score greater than 2.5, consistent with specific recognition of Periostin on the array.



Immunohistochemistry of Periostin antibody in human adrenal gland tissue. Formalin-fixed, paraffin-embedded human adrenal gland was stained with microarray validated Periostin / POSTN antibody (clone POSTN/3502). Brown chromogenic signal is observed predominantly within stromal and extracellular matrix compartments between adrenal cortical cell nests, consistent with the secreted and matrix-associated localization of Periostin, while most adrenal parenchymal nuclei remain negative.

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 Microarray Validated (clone POSTN/3502) is a mouse monoclonal antibody developed for research applications requiring specific detection of this matricellular protein in tissues and cell-based systems. Periostin is synthesized with a signal peptide and secreted into the extracellular space, where it incorporates 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 structural domains mediate interaction with integrins such as alpha v beta 3 and alpha v beta 5, as well as extracellular matrix components including collagen type I and fibronectin. Through these interactions, Periostin supports cytoskeletal organization, fibroblast activation, and collagen fibrillogenesis, particularly in tissues exposed to mechanical stress.

POSTN expression is enriched in periosteum, periodontal ligament, heart valves, and fibrous connective tissues. During embryonic 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 Periostin expression is also 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 described 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 a useful tool for studying tumor microenvironment dynamics and epithelial-mesenchymal interactions.

Microarray validation of clone POSTN/3502 supports its use in large-scale tissue profiling and biomarker research, enabling consistent detection of Periostin expression patterns across diverse sample types at NSJ Bioreagents.

Application Notes

Optimal dilution of the microarray validated Periostin antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 193-326) from the human protein was used as the immunogen for the microarray validated Periostin antibody.

Storage

Aliquot the Periostin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.