Periostin Antibody / POSTN (R31158)

Catalog No.	Formulation	Size
R31158	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q62009
Applications	Western blot: 0.5-1ug/ml
Limitations	This Periostin antibody is available for research use only.



Western blot analysis of Periostin antibody in mouse heart lysate. A single major band is detected at approximately 90-100 kDa, consistent with the predicted molecular weight of Periostin of approximately 93 kDa. The observed migration slightly above the theoretical size is compatible with post-translational modifications such as glycosylation, which are commonly reported for this secreted extracellular matrix protein.

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 is intended for research applications focused on detection of this matricellular protein in connective tissues and tumor stroma. Periostin is synthesized with a signal peptide and secreted into the extracellular space, where it associates with the basement membrane and interstitial matrix to regulate tissue architecture and cell-matrix interactions.

Periostin antibody, also referred to as POSTN antibody and OSF-2 antibody in the literature, targets a member of the

fasciclin family of proteins. The Periostin protein contains an N-terminal EMI domain and four tandem fasciclin-like domains that mediate interactions with integrins, including alpha v beta 3 and alpha v beta 5, as well as extracellular matrix components such as collagen type I and fibronectin. Through these interactions, Periostin promotes cell adhesion, migration, and cytoskeletal organization, particularly in tissues subjected to mechanical stress.

POSTN expression is enriched in periosteum, periodontal ligament, heart valves, and fibrous connective tissues. During development and wound healing, Periostin is upregulated to support matrix remodeling and fibroblast activation. It plays an important role in collagen fibrillogenesis and contributes to structural integrity in bone and cardiovascular tissues. In fibrotic disorders, elevated Periostin expression has been associated with excessive extracellular matrix deposition and chronic tissue remodeling.

In cancer research, Periostin has been widely studied as a stromal marker. Increased POSTN expression is frequently observed in the tumor microenvironment of breast, lung, colon, pancreatic, and ovarian cancers, where it is primarily localized to cancer-associated fibroblasts and peritumoral stroma rather than malignant epithelial cells. This distribution pattern makes Periostin antibody valuable for investigating tumor-stroma interactions, epithelial-mesenchymal transition, and metastatic progression in tissue-based studies.

By enabling detection of extracellular Periostin protein in normal and pathological specimens, Periostin antibody supports research into development, fibrosis, cardiovascular remodeling, and tumor biology at NSJ Bioreagents.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Periostin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of mouse Periostin(NSYYDKVLAHSRIRGRDQ) was used as the immunogen for this Periostin antibody (100% rat homology).

Storage

After reconstitution, the Periostin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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