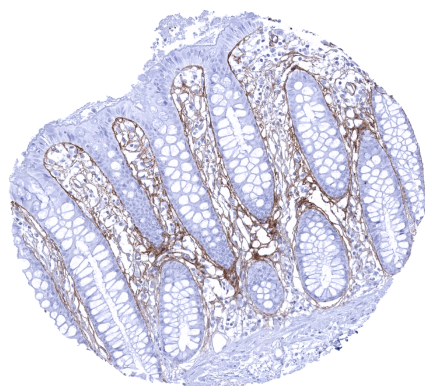


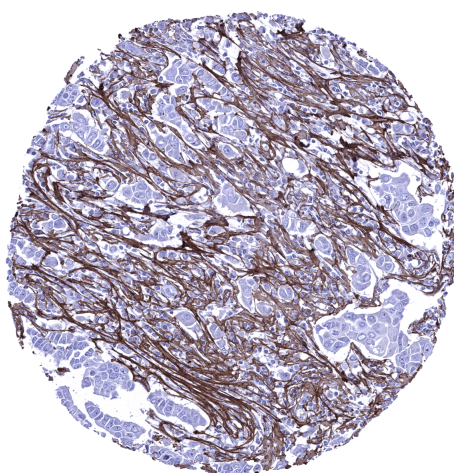
Anti- Periostin Antibody MSVA-649M / Mouse monoclonal

Human SwissProt	Q15063
Human Gene Symbol	POSTN
Synonyms	Fascin-I like; Osteoblast specific factor 2 (OSF2); PDLPOSTN; Periodontal ligament specific periostin; Periostin isoform th2 / th4 / th6 / th8; Periostin osteoblast specific factor; PN; POSTN
Specificity	Periostin
Immunogen	Recombinant fragment of human POSTN protein
Isotype	Mouse / IgG
Species Reactivity	Human

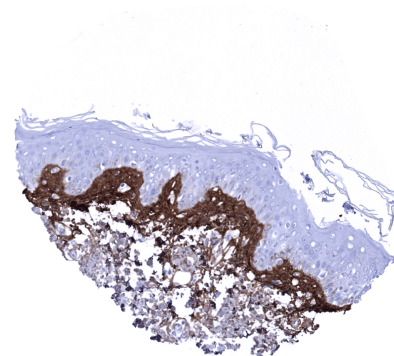
Localization	Secreted > extracellular space > extracellular matrix.
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA
Positive Control	Skin: A strong periostin immunostaining should be seen in the skin, forming a subepithelial band of variable thickness.
Negative Control	Skin: Periostin immunostaining should be lacking in epithelial cells.



Rectum, mucosa - A periostin positive subepithelial band is regularly seen in the colorectal mucosa. Additional periostin deposits occur in the lamina propria.



Abundant periostin positive stroma in an invasive lobular breast cancer.



Skin - Periostin is most regularly seen in a subepithelial band of variable thickness in the skin.

Biology

Periostin (POSTN) also termed osteoblast-specific factor (OSF-2) is a 90kDa protein which is encoded by the POSTN gene at 13q13.3. Periostin is a secreted extracellular matrix protein that was originally identified in cells from the mesenchymal lineage (osteoblasts, osteoblast-derived cells, the periodontal ligament, and periosteum). Periostin plays a wide variety of roles in tissue development along with disease. It is pivotal in multiple different mechanisms of tissue remodeling as a response to injury. Periostin is transiently upregulated during various cell fate changes, whether they are related to alterations in physiology or to pathological changes or injury. Periostin impacts extracellular matrix restructuring, tissue remodeling, and the epithelial-mesenchymal transition, all of which can be related to tissue healing, development, cancer, and other diseases. Thus, periostin functions as a mediator, balancing appropriate and inappropriate responses to tissue damage. In many cancers, periostin binds to integrins on cancer cells, activating the Akt/PKB- and FAK-mediated signaling pathways. This leads to increased cell survival, migration, invasion, angiogenesis, metastasis, and the epithelial-mesenchymal transition.

Potential Research Applications

- The level of periostin immunostaining in the stroma of tumors may have clinical significance and should be further investigated.
- the clinical and diagnostic impact of variable quantities of periostin in a tissue should be evaluated in various disease types including inflammation and heart disease.

Protocol Suggestions

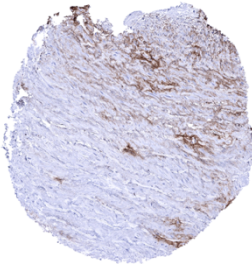
Dilution: 1:150 ; pH 7,8 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

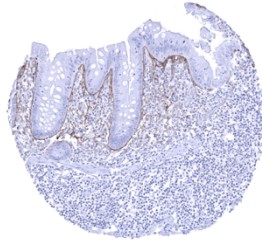
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

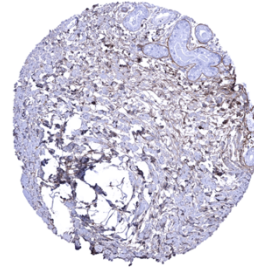
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



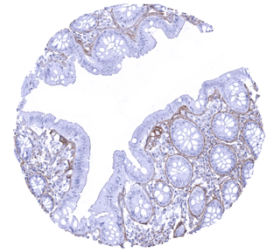
Aorta, media - Focal periostin immunostaining is usually seen in normal appearing media of the aorta of the elderly



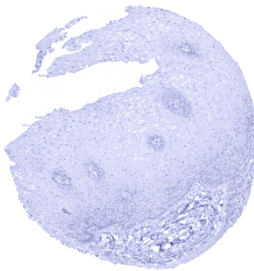
Appendix, mucosa - Periostin is regularly seen in the colorectal mucosa where it forms a characteristic subepithelial band. Additional periostin deposits occur



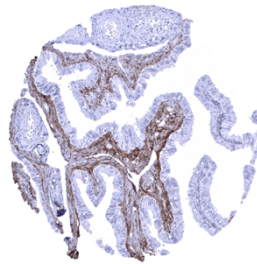
Breast



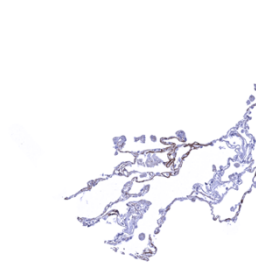
Colon descendens, mucosa - Periostin is regularly seen in the colorectal mucosa where it forms a characteristic subepithelial band. Additional periostin deposits occur in the lamina propria



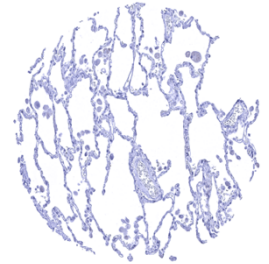
Esophagus, squamous epithelium



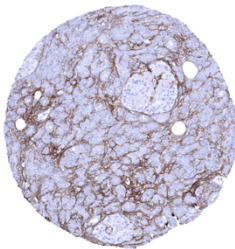
Fallopian tube, mucosa - Periostin immunostaining is typically seen in the fallopian tube where it forms a subepithelial band of variable thickness



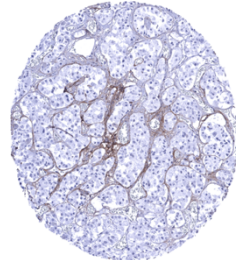
Lung - Periostin immunostaining can be observed in alveoli of the lung



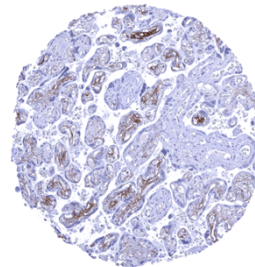
Lung - Periostin immunostaining is usually lacking in alveoli of the lung



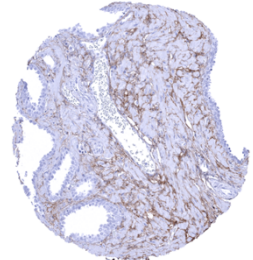
Pancreas - Periostin immunostaining can be abundant in the pancreas



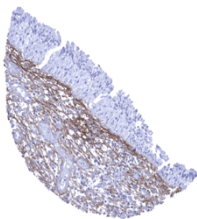
Pituitary gland, anterior lobe - Focal periostin immunostaining can be found in samples from the adenohypophysis



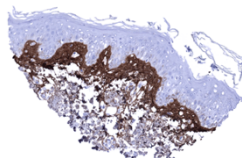
Placenta, mature - Periostin immunostaining can be observed in the mature placenta



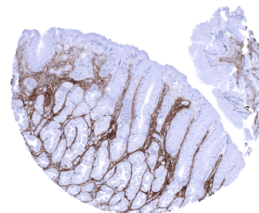
Prostate - Periostin immunostaining can be focally abundant in the prostate



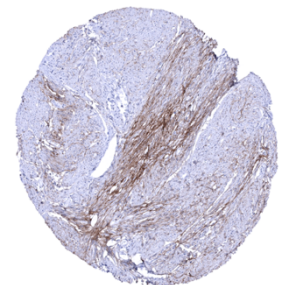
Sinus paranasales - Periostin immunostaining is regularly seen in respiratory epithelium where it forms a subepithelial band of variable thickness



Skin - Periostin immunostaining is most regularly seen in the skin where it forms a subepithelial band of variable thickness



Stomach, corpus - Periostin is regularly seen in the stomach mucosa where it forms a rather thin subepithelial band



Uterus, myometrium - Focal periostin immunostaining can be observed in the myometrium