

Periostin, pan Antibody

Rabbit polyclonal antibody Catalog # AN1183

Specification

Periostin, pan Antibody - Product Information

Application WB
Primary Accession Q62009

Reactivity Chicken, Human, Mouse

Host Rabbit
Clonality polyclonal
Calculated MW 93 KDa

Periostin, pan Antibody - Additional Information

Gene ID 50706
Gene Name POSTN

Other Names

Periostin, PN, Osteoblast-specific factor 2, OSF-2, Postn, Osf2

Target/Specificity

Synthetic peptide corresponding to amino acid residues from the fasciclin domain 1 of mouse periostin.

Dilution

WB~~ 1:1000

Format

Affinity purified

Antibody Specificity

Specific for three periostin bands around ~ 93 kDa in mouse lungextract. The immunogenic peptide is present in all known splice variants of periostin andtherefore this antibody recognizes all known molecular forms of periostin. The antibody alsoworks well for immunohistochemistry on paraformaldehyde-fixed sections with a simple antigenretrieval protocol (incubate slides for 20 minutes at 90° C in 10 mM sodium citrate (pH 6.0)/ 0.1% Tween-20).

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Periostin, pan Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

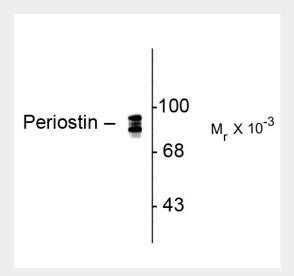


Periostin, pan Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Periostin, pan Antibody - Images



Western blot of rat lung lysate showing specific immunolabeling of the~ 93 kDa periostin protein triplet.

Periostin, pan Antibody - Background

Periostin is a matricellular protein, i.e. an extracellular matrix protein that interacts both with other ECM proteins and with cell-surface receptors. Like many other matricellular proteins, the function of periostin is important both in embryonic development and in the remodeling of adult tissues in response to pathological insults. Periostin was originally isolated as an osteoblast-specific marker that functions as a cell adhesion molecule for preosteoblasts and is thought to be involved in osteoblast recruitment, attachment and spreading (Kruzynska-Frejtag A. et al., 2004). Periostin has recently been shown to promote collagen fibrogenesis, inhibit differentiation of progenitor cells into cardiomyocytes and to be essential in maintaining the biomechanical properties of the adult myocardium (Norris et al., 2008)

Periostin, pan Antibody - References

Kruzynska-Frejtag A, Wang J, Rogers R, Krug E, Hoffman S, Markwald RR, Conway SJ. (2004) Periostin is expressed within the developing teeth at the sites of epithelial-mesenchymal interaction. Develop Dynamics, 229:857-868.

Norris RA, Borq TK, Butcher JT, Baudino TA, Banerjee I, Markwald RR (2008) Neonatal and adult cardiovascular pathophysiological remodeling and repair: developmental role of periostin. Ann NY Acad Sci. 1123:30-40.

Norris RA, Damon B, Mironov V, Kasyanov V, Ramamurthi A, Moreno-Rodriguez R, Trusk T,





Tel: 858.875.1900 Fax: 858.875.1999

Potts JD, Goodwin RL, Davis J, Hoffman S, Wen X, Sugi Y, Kern CB, Mjaatvedt CH, Turner DK, Oka T, Conway SJ, Molkentin JD, Forgacs G, Markwald RR. (2007) Periostin regulates collagen fibrillogenesis and the biomechanical properties of connective tissues. J Cell Biochem. 101(3):695-711.