

Periostin, C-terminal Antibody

Rabbit polyclonal antibody Catalog # AN1182

Specification

Periostin, C-terminal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB <u>Q62009</u> Chicken, Human, Mouse Rabbit polyclonal 93 KDa

Periostin, C-terminal Antibody - Additional Information

Gene ID 50706 Gene Name POSTN Other Names Periostin, PN, Osteoblast-specific factor 2, OSF-2, Postn, Osf2

Target/Specificity

Bacterial fusion protein equivalent to a 188-amino acid polypeptide from the C-terminal region of mouse periostin which is comprised of six small alternatively-spliced exons.

Dilution WB~~ 1:1000

Format Affinity purified

Antibody Specificity

Specific for the ~93 kDa periostin doublet in mouse lung extract. Consistent with the fact that this antibody is made against an alternatively spliced region ofperiostin, this antibody recognizes only the largest two of the three forms of periostin recognizedon Western blots by the Pan periostin antibody (Cat. # 1622-PERI) and also shows a distinctivestaining pattern by immunohistochemistry (data not shown). The antibody works well forimmunohistochemistry on paraformaldehyde-fixed sections with a simple antigen-retrievalprotocol (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, C-terminal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

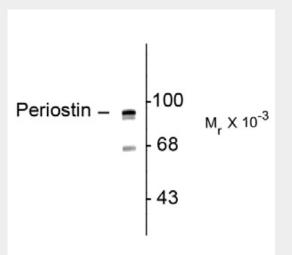


Periostin, C-terminal Antibody - Protocols

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

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

Periostin, C-terminal Antibody - Images



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

Periostin, C-terminal 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 since been demonstrated to be important in heart valve development and myocardial infarction because it promotes collagen fibrogenesis, inhibits differentiation of progenitor cells into cardiomyocytes and is essential in maintaining the biomechanical properties of the adult myocardium (Norris et al., 2008).

Periostin, C-terminal 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.



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