# abcam

## Product datasheet

# Anti-Periostin antibody ab14041

★★★★★ 20 Abreviews 193 References 4 Images

#### Overview

Species reactivity

General notes

**Product name** Anti-Periostin antibody

**Description** Rabbit polyclonal to Periostin

**Host species** Rabbit

**Tested applications** Suitable for: ELISA, ICC/IF, IHC-Fr, IHC-P

Reacts with: Mouse, Rat, Chicken, Human **Immunogen** Recombinant fragment (His-tag) corresponding to Human Periostin (N terminal).

Positive control IHC-P: Human colon and normal skin tissues; Prostate cancer tissues. ICC/IF: HeLa cells.

> Lots # GR310924-1, GR296166-4, and GR296166-5 are sold in lyophilized form. To reconstitute, add 100 µL of deionized water and let the lyophilized antibody dissolve completely. The resulting concentration is 0.5 mg/mL. Slight turbidity may occur after reconstitution, which does not affect

activity of the antibody. In this case clarify the solution by centrifugation.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer Constituents: PBS, 0.58% Sodium chloride

**Purity** Immunogen affinity purified

Clonality Polyclonal

Isotype ΙgG

**Applications** 

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab14041 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
ICC/IF	<b>★★★★</b> <u>(3)</u>	Use at an assay dependent concentration.
IHC-Fr	<b>★★★★★</b> (6)	Use at an assay dependent concentration. PubMed: 19079190
IHC-P	<b>★★★★★(8)</b>	1/100 - 1/1000.

#### **Target**

Function Binds to heparin. Induces cell attachment and spreading and plays a role in cell adhesion. May

play a role in extracellular matrix mineralization.

**Tissue specificity** Widely expressed with highest levels in aorta, stomach, lower gastrointestinal tract, placenta,

uterus and breast. Up-regulated in epithelial ovarian tumors. Not expressed in normal ovaries. Also highly expressed at the tumor periphery of lung carcinoma tissue but not within the tumor.

Overexpressed in breast cancers.

Sequence similarities Contains 1 EMI domain.

Contains 4 FAS1 domains.

Post-translational

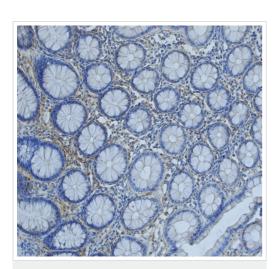
modifications

Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These

residues are essential for the binding of calcium.

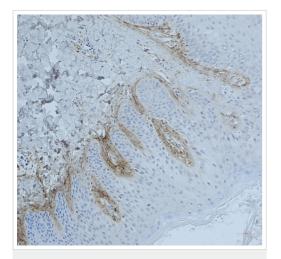
**Cellular localization** Secreted > extracellular space > extracellular matrix.

#### **Images**



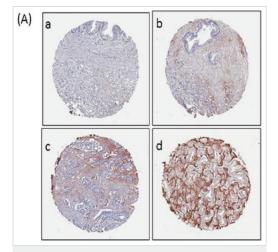
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Periostin antibody (ab14041)

Immunohistochemistry analysis of formalin-fixed paraffin-embedded human colon tissue section labeling Periostin with ab14041.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Periostin antibody (ab14041)

Immunohistochemistry analysis of formalin-fixed paraffin-embedded human normal skin tissue sectionlabeling Periostin with ab14041.

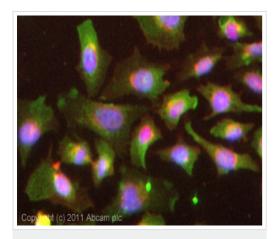


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Periostin antibody (ab14041)

Tian et al. PLoS One. 2015 Mar 17;10(3):e0121502. doi: 10.1371/journal.pone.0121502. eCollection 2015. Fig 1. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

The periostin staining in prostate cancer and paired non-tumorous prostate tissues (TMA from JHU, 140 cases).

(A) The pathologists' criteria for IHC scoring.(a) 0, undetectable; (b)1+, weak staining; (c) 2+, medium staining; (d) 3+, strong staining. Periostin was mainly stained in peritumoral stroma.



Immunocytochemistry/ Immunofluorescence - Anti-Periostin antibody (ab14041)

ICC/IF image of ab14041 stained HeLa (Human epithelial cell line from cervix adenocarcinoma) cells.

The cells were fixed in 100% methanol (5 min) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab14041, 1/1000 dilution) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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