Periostin (F-10): sc-398631

BACKGROUND

Periostin (PN), also designated osteoblast-specific factor 2 (OSF-2), is a disulfide linked protein originally isolated as an osteoblast-specific factor. Periostin is a secreted protein that binds heparin and functions as a ligand for α5β1 and α6β1 Integrins. In preosteoblasts, Periostin acts as a cell adhesion molecule and plays a role in osteoblast recruitment, spreading and attachment. Periostin is mainly detected in lower gastrointestinal tract, aorta, stomach, placenta, uterus and breast tissues but is up-regulated in epithelial ovarian tumors and overexpressed in breast cancer. Expression of Periostin is increased by bone morphogenetic protein (BMP2) and transforming growth factor β1 (TGFβ1). Periostin contains a typical signal sequence, followed by a cysteine-rich domain, a fourfold repeated domain, which shows homology with the insect protein fasciclin, and a C-terminal domain.

CHROMOSOMAL LOCATION

Genetic locus: POSTN (human) mapping to 13q13.3; Postn (mouse) mapping to 3 C.

SOURCE

Periostin (F-10) is a mouse monoclonal antibody raised against amino acids 537-836 mapping at the C-terminus of Periostin of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Periostin (F-10) is available conjugated to agarose (sc-398631 AC), 500 µg/ml, for WB, (H/C/P) and ELISA; to either phycoerythrin (sc-398631 PE), fluorescein (sc-398631 FITC), Alexa Fluor® 488 (sc-398631 AF488), Alexa Fluor® 546 (sc-398631 AF546), Alexa Fluor® 594 (sc-398631 AF594) or Alexa Fluor® 647 (sc-398631 AF647), 200 µg/ml, for WB (RGB), IF, H/C/P and FCM; and to either Alexa Fluor® 680 (sc-398631 AF680) or Alexa Fluor® 790 (sc-398631 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Periostin (F-10) is recommended for detection of Periostin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Periostin secreted glycoprotein: 90 kDa.

Molecular Weight of Periostin: 84/74 kDa.

STORAGE

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA

Simultaneous direct near-infrared western blot analysis of Periostin expression, detected with Periostin (F-10) Alexa Fluor® 680: sc-398631 AF680 and GAPDH expression, detected with GAPDH (6-9) Alexa Fluor® 790: sc-395062 AF790 in human stomach (A) and human lung (B) tissue extracts. Blocked with UltraCruz® Blocking Reagent: sc-61214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker™ MW Tag-Alexa Fluor® 790: sc-516731.

SELECT PRODUCT CITATIONS


RESEARCH USE

For research use only, not for use in diagnostic procedures.

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