

Myofibroblasts (PR 2D3): sc-53383

BACKGROUND

Myofibroblasts are a unique group of smooth muscle-like fibroblasts that play an important role in oncogenesis, inflammation, repair, wound contraction and fibrosis. Like smooth muscle (SM) cells, myofibroblasts contain microfilament bundles and express α -SM Actin, the Actin isoform that is present in myo-epithelial cells and SM cells and especially abundant in vascular SM cells. Myofibroblasts secrete inflammatory and anti-inflammatory cytokines, chemokines, growth factors and lipid and gaseous inflammatory mediators, as well as extracellular matrix proteins and proteases in most organs and tissues. Besides being temporarily present following tissue injuries and fibrocontractive diseases, myofibroblasts are also present under normal conditions in regions such as the skin, pulmonary septa and periodontal ligaments. Stem cell factor and platelet-derived growth factor (PDGF) are two secreted proteins responsible for differentiating myofibroblasts from embryological stem cells.

REFERENCES

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SOURCE

Myofibroblasts (PR 2D3) is a mouse monoclonal antibody raised against normal colorectal mucosa of human origin.

STORAGE

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

PRODUCT

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

Myofibroblasts (PR 2D3) is available conjugated to agarose (sc-53383 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53383 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53383 PE), fluorescein (sc-53383 FITC), Alexa Fluor[®] 488 (sc-53383 AF488), Alexa Fluor[®] 546 (sc-53383 AF546), Alexa Fluor[®] 594 (sc-53383 AF594) or Alexa Fluor[®] 647 (sc-53383 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53383 AF680) or Alexa Fluor[®] 790 (sc-53383 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Myofibroblasts (PR 2D3) is recommended for detection of myofibroblasts of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.