

## Monoclonal Antibody to Fibroplasts / Epithelial Cells - PE

Alternate names: Fibroblast Marker, Fibroblasten

Catalog No.: SM1214R

Quantity: 100 Tests

Background: A fibroblast is a connective-tissue cell of mesenchymal (somewhat undifferentiated) origin

that secretes proteins from which the extracellular fibrillar matrix of connective tissue forms. Epithelial cells are cells that cover the surface of the body and line its cavities.

Host / Isotype: Mouse / IgG2a

Clone: D7-FIB

Immunogen: Human foreskin Fibroblasts.

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2

myeloma cell line.

Format: State: Lyophilized purified IgG fraction.

Purification: Affinity Chromatography on Protein G.

Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA

and 5% sucrose as stabilizer. **Label:** PE – R. Phycoerythrin (RPE)

**Reconstitution:** Restore with 0.25 ml (SM1214RT) or 1 ml (SM1214R) distilled water.

**Applications:** Flow Cytometry: Use 10 μl of neat-1/10 diluted antibody to label 10e6 cells in 100 μl. This product is routinely tested in Flow Cytometry on the KG1 cell line.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: This antibody recognises a 112kD molecule expressed on the cell surface of human

fibroblasts and epithelial cells. In peripheral blood the antibody stains myeloid cells and a

very small number of lymphocytes.

Studies upon the antigen have shown it to be sensitive to SDS, but resistant to trypsin,

tunicamycin and collagenase.

In immunohistological studies the antibody has also been found to bind to epithelium,

myoepthelium, smooth muscle and some leucocytes.

D7-FIB has been shown to be useful as a cell membrane marker to characterize chondrocyte differentiation giving a positive reaction with dedifferentiated human

chondrocytes, and negative with differentiated chondrocytes. (3)

Species Reactivity: Tested: Human. Does not react with Mouse and Rat.



SM1214R: Monoclonal Antibody to Fibroplasts / Epithelial Cells - PE

Storage: Store the antibody undiluted Prior to and After reconstitution at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

**Product Citation:** Unconjugated antibody is cited in:

1. Michael R. Nazareth, Lori Broderick, Michelle R. Simpson-Abelson, Raymond J. Kelleher,

Jr., Sandra J. Yokota, and Richard B. Bankert Characterization of Human Lung Tumor-Associated Fibroblasts and Their Ability to Modulate the Activation of

Tumor-Associated T Cells J. Immunol., May 2007; 178: 5552-5562.

General References: 1. Fearns, C. and Dowdle, E. B. (1992) The desmoplastic response: induction of collagen

synthesis by melanoma cells in vitro. Int. J. Cancer. 50:621-627.

2. Kelynack, K. J. et al. (2000) Human renal fibroblast contraction of collagen I lattices is an

integrin-mediated process Nephrol. Dial. Transplant. 15:1766-1772.

3. Van Osch, G.J.V.M., et al. (2001) Monoclonal antibody 11-Fibrau: A useful marker to characterize chondrocyte differentiation stage. Biochem. Biophys. Res. Commun.

280:806-812.