SANTA CRUZ BIOTECHNOLOGY, INC.

Human Thymic Fibroblasts (TE7): sc-73603

BACKGROUND

Fibroblast cells synthesize and maintain the extracellular matrix in a wide variety of mammalian tissues. Fibroblasts not only provide a structural framework for many tissues but also play an important role in wound healing. They are continuously secreting precursors of the extracellular matrix, specifically the collagens, glycosaminoglycans, reticular and elastic fibers, and glycoproteins. Fibroblasts are morphologically heterogeneous and are not restricted by a polarizing attachment to a basal lamina. They have a branched cytoplasm surrounding an elliptical, speckled nucleus having one or two nucleoli. Fibroblasts proliferate easily, making them a popular cell type for cell cultures in biological research. Fibroblast markers are a useful aid in the identification and behavioral analysis of these cells; for example, the intermediate filament protein Vimentin, which is expressed on fibroblast cells, is used as a marker to distinguish the mesodermal origin of the cells.

REFERENCES

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8. Jie, G., Lin, Z., Zhang, L., Lv, H., He, P. and Zhao, B. 2006. Free radical scavenging effect of Pu-erh tea extracts and their protective effect on oxidative damage in human fibroblast cells. J. Agric. Food Chem. 54: 8058-8064.
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SOURCE

Human Thymic Fibroblasts (TE7) is a mouse monoclonal antibody raised against thymic stroma of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Human Thymic Fibroblasts (TE7) is recommended for detection of thymomas and differential detection of medastinal tumors 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: Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS

1. Bliss, L.A., Sams, M.R., Deep-Soboslay, A., Ren-Patterson, R., Jaffe, A.E., Chenoweth, J.G., Jaishankar, A., Kleinman, J.E. and Hyde T.M. 2012. Use of postmortem human dura mater and scalp for deriving human fibroblast cultures. PLoS ONE 7: e45282.
2. Grube, S., Freitag, D., Kalff, R., Ewald, C. and Walter, J. 2020. Characterization of adherent primary cell lines from fresh human glioblastoma tissue, defining glial fibrillary acidic protein as a reliable marker in establishment of glioblastoma cell culture. Cancer Rep. E-published.
3. Vukusic, K., Thorsell, A., Muslimovic, A., Jonsson, M., Dellgren, G., Lindahl, A., Sandstedt, J. and Hammarsten, O. 2022. Overexpression of the SARS-CoV-2 receptor angiotensin converting enzyme 2 in cardiomyocytes of failing hearts. Sci. Rep. 12: 965.

STORAGE

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

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.