Apoptotic Myeloid Marker (BOB93): sc-130294



The Power to Question

BACKGROUND

Myeloid cells originate in the bone marrow during hematopoiesis and encompass all hemopoietic cells except the lymphoid cells (T cells, B cells, NK cells and dendritic cells). Vascular endothelial cells can differentiate from common myeloid progenitors, and these cells that form the bone marrow-derived myeloid lineage express markers such as CD31, von Willebrand factor and Tie2. Other myeloid markers may be used to track certain diseases, such as Kawasaki disease, a self-limited vasculitis that affects many organs, including the skin and mucous membranes, lymph nodes, blood vessel walls and heart.

REFERENCES

- Bettelheim, P., Paietta, E., Majdic, O., Gadner, H., Schwarzmeier, J. and Knapp, W. 1982. Expression of a myeloid marker on TdT+ acute lymphocytic leukemic cells: evidence by double-fluorescence staining. Blood 60: 1392-1396.
- Dolinsky, Z.S., Morse, D.E., Kaplan, R.F., Meyer, R.E., Corry, D. and Pomerleau, O.F. 1987. Neuroendocrine, psychophysiological and subjective reactivity to an alcohol placebo in male alcoholic patients. Alcohol. Clin. Exp. Res. 11: 296-300.
- Gabius, S., Joshi, S.S., Gabius, H.J. and Sharp, J.G. 1991. Establishment, characterization and determination of cell surface sugar receptor (lectin) expression by neoglycoenzymes of a human myeloid marker-expressing B lymphoblastoid cell line. Anticancer Res. 11: 793-800.
- 4. Welker, P., Grabbe, J., Zuberbier, T., Guhl, S. and Henz, B.M. 2000. Mast cell and myeloid marker expression during early *in vitro* mast cell differentiation from human peripheral blood mononuclear cells. J. Invest. Dermatol. 114: 44-50.
- Fujiyama, S., Amano, K., Uehira, K., Yoshida, M., Nishiwaki, Y., Nozawa, Y., Jin, D., Takai, S., Miyazaki, M., Egashira, K., Imada, T., Iwasaka, T. and Matsubara, H. 2003. Bone marrow monocyte lineage cells adhere on injured endothelium in a monocyte chemoattractant protein-1-dependent manner and accelerate reendothelialization as endothelial progenitor cells. Circ. Res. 93: 980-989.
- Lin, Y., Roberts, T.J., Sriram, V., Cho, S. and Brutkiewicz, R.R. 2003. Myeloid marker expression on antiviral CD8+ T cells following an acute virus infection. Eur. J. Immunol. 33: 2736-2743.
- Viemann, D., Strey, A., Janning, A., Jurk, K., Klimmek, K., Vogl, T., Hirono, K., Ichida, F., Foell, D., Kehrel, B., Gerke, V., Sorg, C. and Roth, J. 2005. Myeloid-related proteins 8 and 14 induce a specific inflammatory response in human microvascular endothelial cells. Blood 105: 2955-2962.
- 8. Bailey, A.S., Willenbring, H., Jiang, S., Anderson, D.A., Schroeder, D.A., Wong, M.H., Grompe, M. and Fleming, W.H. 2006. Myeloid lineage progenitors give rise to vascular endothelium. Proc. Natl. Acad. Sci. USA 103: 13156-13161.
- Frey, A.B. 2006. Myeloid suppressor cells regulate the adaptive immune response to cancer. J. Clin. Invest. 116: 2587-2590.

RESEARCH USE

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

SOURCE

Apoptotic Myeloid Marker (BOB93) is a mouse monoclonal antibody raised against apoptotic THP-1 cells of human origin.

PRODUCT

Each vial contains 200 μg lgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Apoptotic Myeloid Marker (BOB93) is available conjugated to agarose (sc-130294 AC), 500 $\mu g/0.25$ ml agarose in 1 ml, for IP; to HRP (sc-130294 HRP), 200 $\mu g/ml$, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-130294 PE), fluorescein (sc-130294 FITC), Alexa Fluor® 488 (sc-130294 AF488), Alexa Fluor® 546 (sc-130294 AF546), Alexa Fluor® 594 (sc-130294 AF594) or Alexa Fluor® 647 (sc-130294 AF647), 200 $\mu g/ml$, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-130294 AF680) or Alexa Fluor® 790 (sc-130294 AF790), 200 $\mu g/ml$, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Apoptotic Myeloid Marker (B0B93) is recommended for detection of the surface marker of all apoptotic cells of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and flow cytometry (1 μ g per 1 x 10⁶ cells).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

STORAGE

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

PROTOCOLS

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

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