SANTA CRUZ BIOTECHNOLOGY, INC.

DC Marker (33D1): sc-23953

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The DC Marker antibody reacts with an antigen on most dendritic cells (DC) of spleen, lymph node and Peyer's patch. It is not present on liver, bone marrow or epidermal dendritic cells; macrophages; other leukocytes; or erythroid cells. Bone-marrow dendritic cells can be induced to express the 33D1 antigen by culture in the presence of GM-CSF. The addition of IL-4 to GM-CSF in bone-marrow cultures down-regulates 33D1 expression.

REFERENCES

1. Nussenzweig, M.C., et al. 1982. A monoclonal antibody specific for mouse dendritic cells. Proc. Natl. Acad. Sci. USA 79: 161-165.
2. Steinman, R.M., et al. 1983. Dendritic cells are the principal stimulators of the primary mixed leukocyte reaction in mice. J. Exp. Med. 157: 613-627.
3. Crowley, M., et al. 1989. The cell surface of mouse dendritic cells: FACS analyses of dendritic cells from different tissues including thymus. Cell. Immunol. 118: 108-125.
4. Woo, J., et al. 1994. Isolation, phenotype, and allostimulatory activity of mouse liver dendritic cells. Transplantation 58: 484-491.
5. Kelsall, B.L., et al. 1996. Distinct populations of dendritic cells are present in the subepithelial dome and T cell regions of the murine Peyer's patch. J. Exp. Med. 183: 237-247.
6. Masurier, C., et al. 1999. Immunophenotypical and functional heterogeneity of dendritic cells generated from murine bone marrow cultured with different cytokine combinations: implications for anti-tumoral cell therapy. Immunology 96: 569-577.
7. Fischer, H.G., et al. 2000. Phenotype and functions of brain dendritic cells emerging during chronic infection of mice with *Toxoplasma gondii*. J. Immunol. 64: 4826-4834.

SOURCE

DC Marker (33D1) is a rat monoclonal antibody raised against mouse dendritic cells.

PRODUCT

Each vial contains 200 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DC Marker (33D1) is available conjugated to agarose (sc-23953 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-23953 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23953 PE), fluorescein (sc-23953 FITC), Alexa Fluor® 488 (sc-23953 AF488), Alexa Fluor® 546 (sc-23953 AF546), Alexa Fluor® 594 (sc-23953 AF594) or Alexa Fluor® 647 (sc-23953 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-23953 AF680) or Alexa Fluor® 790 (sc-23953 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

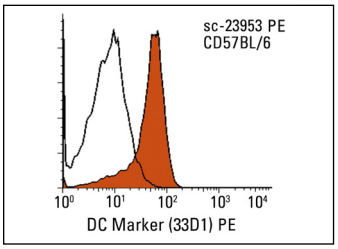
RESEARCH USE

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

APPLICATIONS

DC Marker (33D1) is recommended for detection of dendritic cells of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

DATA



DC Marker (33D1): sc-23953. Indirect FCM analysis of C57BL/6 splenocytes, DC enriched cells, stained with DC Marker (33D1), followed by mouse anti-rat IgG Cy5 conjugated secondary antibody. Kindly provided by Dr. Diana Dudziak, Rockefeller University.

SELECT PRODUCT CITATIONS

1. Long, J., et al. 2013. Improvement of HBsAg gene-modified dendritic cell-based vaccine efficacy by optimizing immunization method or the application of β-glucosylceramide. Immunol. Invest. 42: 137-155.

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.