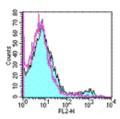


# Anti-Mouse Dendritic Cell Marker (33D1) Purified

Catalog Number: 14-5884

Also Known As:DC Marker, DC inhibitor receptor 2

**RUO: For Research Use Only** 



Staining of BALB/c splenocytes with 0.25 ug of Rat IgG2b K Isotype Control Purified (cat. 14-4031) (open histogram) or 0.25 ug of Anti-Mouse Dendritic Cell Marker (33D1) Purified (filled histogram) followed by Anti-Rat IgG Biotin (cat. 13-4813) and Streptavidin PE (cat. 12-4317). Total viable cells were used for analysis.

## **Product Information**

Contents: Anti-Mouse Dendritic Cell Marker (33D1) Purified

REF Catalog Number: 14-5884

Clone: 33D1

Concentration: 0.5 mg/mL Host/Isotype: Rat IgG2b, kappa Formulation: aqueous buffer, 0.09% sodium azide, may

contain carrier protein/stabilizer

**Temperature Limitation:** Store at 2-8°C.

Batch Code: Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

#### Description

The 33D1 monoclonal antibody reacts with a mouse DC-specific surface marker. The nature and biological activity of the 33D1 antigen is as of yet unknown. 33D1 has been reported on a variety of dendritic cell subpopulations from mouse thymus, spleen, lymph node, and Peyer's patch. Bone marrow dendritic cells require GM-CSF to express the 33D1 antigen and this expression is down regulated in the presence of IL-4. 33D1 antigen has been detected *in vivo* in brain dendritic cells post infection via *Toxoplasma gondii*.

### **Applications Reported**

This 33D1 antibody has been reported for use in flow cytometric analysis, immunohistology staining of frozen tissue sections, and immunohistochemical staining. It has also been reported in complement-mediated cytotoxicity. (Please use Functional Grade purified 33D1 in functional assays.)

## **Applications Tested**

The 33D1 antibody has been tested by flow cytometric analysis of mouse splenocyte cell suspensions. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

#### **Special Notes**

For detection of purified 33D1 it is recommended **not** to use goat anti-rat due to it's low affinity for 33D1. Rather, we recommend using biotin mouse anti-rat (cat. 13-4813).

## References

Idoyaga J, Lubkin A, Fiorese C, Lahoud MH, Caminschi I, Huang Y, Rodriguez A, Clausen BE, Park CG, Trumpfheller C, Steinman RM. Comparable T helper 1 (Th1) and CD8 T-cell immunity by targeting HIV gag p24 to CD8 dendritic cells within antibodies to Langerin, DEC205, and Clec9A. Proc Natl Acad Sci U S A. 2011 Feb 8;108(6):2384-9. (DCIR2, **33D1**, FC, PubMed)

Dudziak D, Kamphorst AO, Heidkamp GF, Buchholz VR, Trumpfheller C, Yamazaki S, Cheong C, Liu K, Lee HW, Park CG, Steinman RM, Nussenzweig MC. Differential antigen processing by dendritic cell subsets in vivo. Science. 2007 Jan 5;315(5808):107-11. (33D1, IHC frozen, PubMed)

Steinman, R.M., B. Gutchinov, M.D. Witmer, and M.C. Nussenzweig. 1983. Dendritic cells are the principal stimulators of the primary mixed leukocyte reaction in mice. J. Exp. Med. 157: 613 - 627.

Nussenzweig, M.C., R.M. Steinman, M.D. Witmer, and B. Gutchinov. 1982. A monoclonal antibody specific for mouse dendritic cells. Proc. Natl. Acad. Sci. USA 79: 161 - 165.

## **Related Products**

11-4317 Streptavidin FITC
11-4811 Anti-Rat IgG FITC
12-4317 Streptavidin PE
13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4031 Rat IgG2b K Isotype Control Purified

17-2051 Anti-Mouse CD205 APC (205yekta)

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