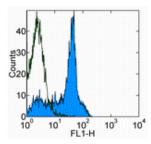


## **Anti-Mouse CD38 Purified**

Catalog Number: 14-0381

Also Known As: ADP-Ribosyl Cyclase, Cyclic ADP-Ribose Hydrolase RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of BALB/c splenocytes with 0.06 ug of Rat IgG2a Isotype Control Purified (cat. 14-4321) (open histogram) or 0.06 ug Anti-Mouse CD38 Purified (filled histogram) followed by Anti-Rat IgG FITC (cat. 11-4811). Total viable cells were used for analysis.

#### **Product Information**

Contents: Anti-Mouse CD38 Purified

REF Catalog Number: 14-0381

Clone: 90

Concentration: 0.5 mg/mL Host/Isotype: Rat IgG2a, kappa Formulation: aqueous buffer, 0.09% sodium azide, may

contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

Datch Code: Refer to Vial ☐ Use By: Refer to Vial

Caution, contains Azide

#### Description

The 90 monoclonal antibody reacts with the mouse CD38 molecule, an ~42 kDa type II transmembrane protein. CD38 is expressed at increasingly higher levels on B cells at each stage of B-cell differentiation, and is then down-regulated on germinal center B cells and mature plasma cells. Its expression is reported on a subpopulation of thymocytes, mature T cells, and NK cells. Crosslinking of CD38 on the surface of mature, resting B cells induces B-cell proliferation, which is enhanced by co-signals such as IL-4 and LPS. CD38, a counter-receptor for CD31, is an ectoenzyme with cyclase and hydrolase enzymatic activity and is speculated to play a role in lymphocyte activation and differentiation.

#### **Applications Reported**

The 90 antibody has been reported for use in flow cytometric analysis, and immunohistochemical staining. It has also been reported in functional assays. (Please use Functional Grade purified 90, cat. 16-0381, in functional assays.)

## **Applications Tested**

The 90 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 0.125  $\mu$ 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.

#### References

Oliver, A. M., J. C. Grimaldi, et al. 1999. Independently ligating CD38 and Fc gammaRIIB relays a dominant negative signal to B cells. Hybridoma 18(2): 113-9.

Oliver, A. M., F. Martin, et al. 1997. Marginal zone B cells exhibit unique activation, proliferative and immunoglobulin secretory responses. Eur J Immunol 27(9): 2366-74.

Oliver, A. M., F. Martin, et al. 1997. Mouse CD38 is down-regulated on germinal center B cells and mature plasma cells. J Immunol 158 (3): 1108-15.

## **Related Products**

11-4811 Anti-Rat IgG FITC

14-4321 Rat IgG2a K Isotype Control Purified (eBR2a)

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