
Anti-Mouse CD38 Functional Grade Purified

Catalog Number: 16-0381

Also Known As: ADP-Ribosyl Cyclase, Cyclic ADP-Ribose Hydrolase

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Mouse CD38 Functional Grade Purified

 **Catalog Number:** 16-0381

Clone: 90

Concentration: 1 mg/mL

Host/Isotype: Rat IgG2a, kappa

Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide

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

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

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 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 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ 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

11-0031 Anti-Mouse CD3e FITC (145-2C11)

16-4321 Rat IgG2a K Isotype Control Functional Grade Purified (eBR2a)

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