SONY

Product Data Sheet

Alexa Fluor® 700 anti-mouse CD38

Catalog # / Size: 1113710 / 100 µg
1113705 / 25 µg

Clone: 90

Isotype: Rat IgG2a, κ

Immunogen: Mouse bone marrow pre-B cells

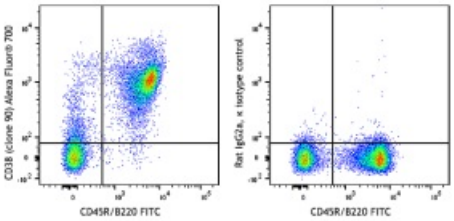
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Workshop Number: 750 under optimal conditions.

Concentration: 0.5



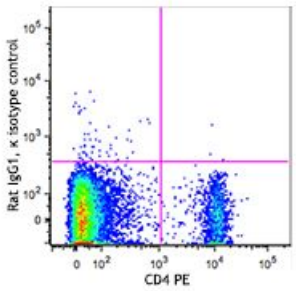
C57BL/6 splenocytes were stained with anti-mouse CD45R/B220 FITC and anti-mouse CD38 (clone 90) Alexa Fluor® 700 (left) or rat IgG2a, κ isotype control (right).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.



Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemistry[1,2] of acetone-fixed frozen sections, and induction of B cell proliferation[1].

Application References:

1. Oliver AM, *et al.* 1997. *J. Immunol.* 158:1108.
2. Howard M, *et al.* 1993. *Science* 262:1056.

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Description: CD38 is a 42 kD glycoprotein, also known as T10. It is an ADP-ribosyl hydrolase, expressed on B cells, NK cells, a subset of T cells, brain, muscle, and kidney. In mouse, CD38 expression is downregulated on germinal center B cells and plasma cells, whereas this is not the case for humans. By functioning as both a cyclase and a hydrolase, CD38 mediates lymphocyte activation, as well as adhesion and metabolism of cADPR and NAADP. CD31 is the ligand of CD38.

Antigen References:

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Shubinsky G, *et al.* 1997. *Immunity* 7:315.
3. Cesano A, *et al.* 1998. *J. Immunol.* 160:1106.
4. Cockayne DA, *et al.* 1998. *Blood* 92:1324.

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