

CD38 Monoclonal Antibody (90), Alexa Fluor 700, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Alexa Fluor 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	90
Conjugate	Alexa Fluor® 700
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_657740

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	9 Publications

Product Specific Information

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: This 90 antibody has been reported for use in flow cytometric analysis.

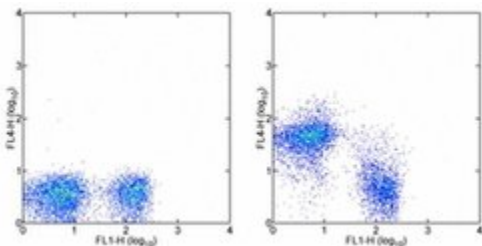
Applications Tested: This 90 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should 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.

Alexa Fluor® 700 emits at 723 nm and can be excited with the red laser (633 nm). Most instruments will require a 685 LP mirror and 710/20 filter. Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 723 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD38 Monoclonal Antibody (90), Alexa Fluor 700, eBioscience™



CD38 Antibody (56-0381-82) in Flow

Staining of BALB/c splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031-82) and 0.06 µg of Rat IgG2a K Isotype Control Alexa Fluor® 700 (Product # 56-4321-80) (left) or 0.06 µg of Anti-Mouse CD38 Alexa Fluor® 700 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

9 References

Flow Cytometry (9)

Nature communications

EZH2 enables germinal centre formation through epigenetic silencing of CDKN1A and an Rb-E2F1 feedback loop.

"Published figure using CD38 monoclonal antibody (Product # 56-0381-82) in Flow Cytometry"

Authors: Béguelin W, Rivas MA, Calvo Fernández MT, Teater M, Purwada A, Redmond D, Shen H, Challman MF, Elemento O, Singh A, Melnick AM

Species

Not Applicable

Dilution

Not Cited

Year

2017

Journal of immunology (Baltimore, Md. : 1950)

IL-4 Haploinsufficiency Specifically Impairs IgE Responses against Allergens in Mice.

"56-0381 was used in Flow cytometry/Cell sorting to identify that mice with only one intact Il4 gene copy are significantly impaired in their ability to make specific IgE responses against allergens, whereas IgG1 responses to allergens remain unaffected."

Authors: Robinson MJ, Prout M, Mearns H, Kyle R, Camberis M, Forbes-Blom EE, Paul WE, Allen CD, Le Gros G

Species

Mouse

Dilution

Not Cited

Year

2017

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

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