

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	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
Excitation/Emission Max	696/719 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
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	34 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.

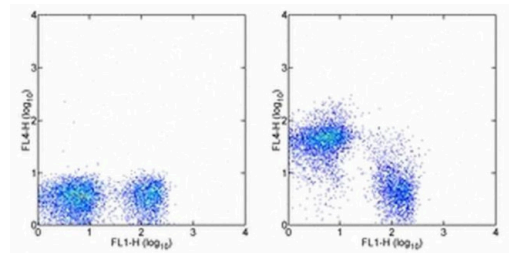
Applications Tested: This 90 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should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

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34 References

Flow Cytometry (34)

<p>Nature communications</p> <p>B cell class switch recombination is regulated by DYRK1A through MSH6 phosphorylation.</p> <p>"56-0381-82 was used in Flow cytometry/Cell sorting to demonstrate DYRK1A-mediated biological mechanisms of B cell immune responses that may be used for therapeutic manipulation in antibody-mediated autoimmunity."</p> <p>Authors: Stoler-Barak L,Harris E,Peres A,Hezroni H,Kuka M,Di Lucia P,Grenov A,Gurwicz N,Kupervaser M,Yip BH, Iannacone M,Yaari G,Crispino JD,Shulman Z</p>	<p>Year 2023</p> <p>Species Mouse</p> <p>Dilution 1:400</p>
<p>NPJ vaccines</p> <p>CD4 T cell epitope abundance in ferritin core potentiates responses to hemagglutinin nanoparticle vaccines.</p> <p>"56-0381-82 was used in Flow cytometry/Cell sorting to show that availability of helper CD4 T cell epitopes may be a key additional mechanism that underlies the enhanced immunogenicity of ferritin-based HA-Fe-nanoparticle vaccines."</p> <p>Authors: Nelson SA,Richards KA,Glover MA,Chaves FA,Crank MC,Graham BS,Kanekiyo M,Sant AJ</p>	<p>Year 2022</p> <p>Species Mouse</p> <p>Dilution 1:200</p>

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