

CD38 Monoclonal Antibody (90), PE-Cyanine7, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	90
Conjugate	PE-Cyanine7
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_2573344

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	10 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 splenocytes. 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.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

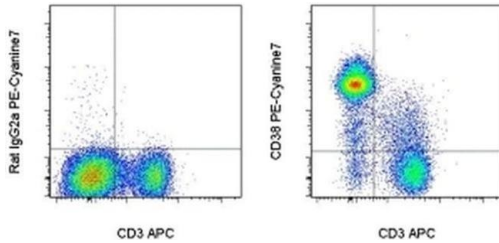
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific

performance should be determined empirically.

Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD38 Monoclonal Antibody (90), PE-Cyanine7, eBioscience™



CD38 Antibody (25-0381-82) in Flow

Staining of mouse splenocytes with Anti-Mouse CD3e APC (Product # 17-0031-82) and 0.06 µg of Rat IgG2a K Isotype Control PE-Cyanine7 (Product # 25-4321-82) (left) or 0.06 µg of Anti-Mouse CD38 PE-Cyanine7 (right). Cells in the lymphocyte gate were used for analysis.

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

10 References

Flow Cytometry (10)

Veterinary research

Influenza NG-34 T cell conserved epitope adjuvanted with CAF01 as a possible influenza vaccine candidate.

"25-0381 was used in Flow cytometry/Cell sorting to define the most efficient combination of antigen / adjuvant to combat influenza virus infections."

Authors: Sisteré-Oró M, Pedersen GK, Córdoba L, López-Serrano S, Christensen D, Darji A

Species
Mouse

Dilution
Not Cited

Year
2020

Cell death and differentiation

CHK1 dosage in germinal center B cells controls humoral immunity.

"Published figure using CD38 monoclonal antibody (Product # 25-0381-82) in Flow Cytometry"

Authors: Schoeler K, Jakic B, Heppke J, Soratroi C, Aufschnaiter A, Hermann-Kleiter N, Villunger A, Labi V

Species
Not Applicable

Dilution
Not Cited

Year
2019

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

More applications with references on thermofisher.com

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