

# CD38 Monoclonal Antibody (90), PerCP-eFluor™ 710, 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), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	90
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 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_10853677

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 µg/test	16 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 0.06 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

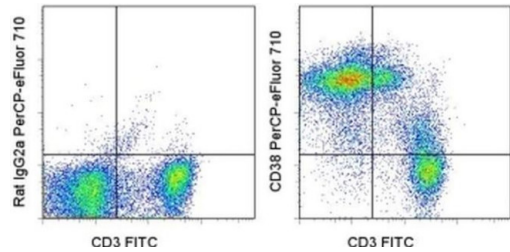
**Fixation:** Samples can be stored in IC Fixation Buffer (Product # 00-822-49) (100 µL cell sample + 100 µL IC Fixation Buffer) or

1-step Fix/Lyse Solution (Product # 00-5333-54) 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 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD38 Monoclonal Antibody (90), PerCP-eFluor™ 710, eBioscience™



**CD38 Antibody (46-0381-82) in Flow**  
Staining of C57Bl/6 splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031-82) and 0.03 µg of Rat IgG2a K Isotype Control PerCP-eFluor® 710 (Product # 46-4321-82) (left) or 0.03 µg of Anti-Mouse CD38 PerCP-eFluor® 710 (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.cn

16 References

Flow Cytometry (16)

International journal of molecular sciences	Year 2023
<b>Establishment and Characterization of Free-Floating 3D Macrophage Programming Model in the Presence of Cancer Cell Spheroids.</b>	Species Mouse
"46-0381-82 was used in Flow cytometry/Cell sorting to establish and characterized a new in vitro 3D model for macrophage programming in the presence of cancer cell spheroids."	
Authors: Korotkaja K,Jansons J,Spunde K,Rudevica Z,Zajakina A	
Vaccines	Year 2021
<b>Alphavirus-Driven Interferon Gamma (IFNγ) Expression Inhibits Tumor Growth in Orthotopic 4T1 Breast Cancer Model.</b>	
"Published figure using CD38 monoclonal antibody (Product # 46-0381-82) in Flow Cytometry"	
Authors: Trofimova O,Korotkaja K,Skrastina D,Jansons J,Spunde K,Isaguliantis M,Zajakina A	

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