

# CD38 Monoclonal Antibody (90), APC, 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), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	90
Conjugate	APC
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_469382

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 µg/test	14 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.

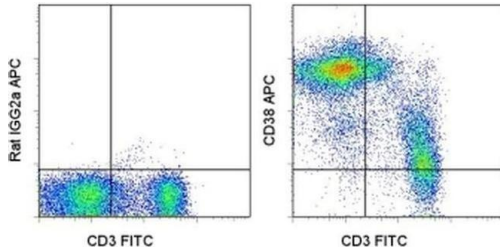
Applications Reported: The 90 antibody has been reported for use in flow cytometric analysis.

Applications Tested: The 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.

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For CD38 Monoclonal Antibody (90), APC, eBioscience™



### CD38 Antibody (17-0381-82) 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 APC (Product # 17-4321-81) (left) or 0.03 µg of Anti-Mouse CD38 APC (right). Cells in the lymphocyte gate were used for analysis.

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## 14 References

### Flow Cytometry (14)

#### Oncoimmunology

### Angiotensin converting enzyme inhibitors and angiotensin II receptor antagonist attenuate tumor growth via polarization of neutrophils toward an antitumor phenotype.

"17-0381 was used in Flow cytometry/Cell sorting to investigate how modulation of Ang II pathway attenuates tumour growth via polarisation of neutrophils to an antitumoural phenotype."

Authors: Shrestha S, Noh JM, Kim SY, Ham HY, Kim YJ, Yun YJ, Kim MJ, Kwon MS, Song DK, Hong CW

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2021

#### Immunity

### Heterogenous Populations of Tissue-Resident CD8<sup>+</sup> T Cells Are Generated in Response to Infection and Malignancy.

"17-0381 was used in Flow cytometry/Cell sorting to identify discrete lineages of intestinal antigen-specific CD8<sup>+</sup> T cells, including a Blimp1<sup>hi</sup>Id3<sup>lo</sup> tissue-resident effector cell population most prominent in the early phase of acute viral and bacterial infections and a molecularly distinct Blimp1<sup>lo</sup>Id3<sup>hi</sup> tissue-resident memory population that subsequently accumulated at later infection time points."

Authors: Milner JJ, Toma C, He Z, Kurd NS, Nguyen QP, McDonald B, Quezada L, Widjaja CE, Witherden DA, Crowl JT, Shaw LA, Yeo GW, Chang JT, Omilusik KD, Goldrath AW

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2020

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

## More applications with references on thermofisher.com

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