

# TCR V alpha 2 Monoclonal Antibody (B20.1), PE, eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, lambda
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	B20.1
Conjugate	PE
Excitation/Emission Max	565/576 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_465949

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	19 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

**Description:** The B20.1 monoclonal antibody reacts with mouse T-cell receptor (TCR) V alpha 2 chains. This antibody recognizes the majority of the TCR V alpha 2 subfamily in mice carrying the a, b and c haplotypes. The antibody also reacts with the products of T cell receptor, V delta 8 due to the high degree of homology.

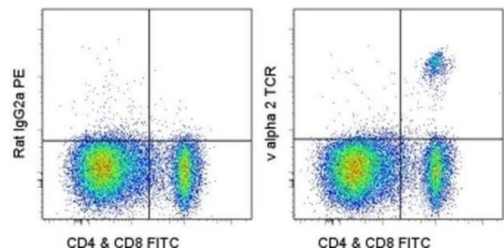
**Applications Reported:** This B20.1 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This B20.1 antibody has been tested by flow cytometric analysis of mouse lymph node cells. This can be used at less than or equal to 0.5 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 to preblock Fc receptors for 10 minutes using 0.5 µg of purified anti-mouse CD16/32 (cat. 14-0161). It is also recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Excitation:** 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.

Product Images For TCR V alpha 2 Monoclonal Antibody (B20.1), PE, eBioscience™



**TCR V alpha 2 Antibody (12-5812-82) in Flow**  
Staining of C57Bl/6 splenocytes with Anti-Mouse CD4 FITC (Product # 11-0042-82) and Anti-Mouse CD8a FITC (Product # 11-0081-82) and 0.25 µg of Rat IgG2a K Isotype Control PE (Product # 12-4321-80) (left) or 0.25 µg of Anti-Mouse V alpha 2 TCR PE (right). Total viable cells were used for analysis.

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

20 References

Flow Cytometry (19)

**Nature**

**Clonally expanded CD8 T cells characterize amyotrophic lateral sclerosis-4.**

"12-5812-82 was used in Flow cytometry/Cell sorting to provide evidence of an antigen-specific CD8 T cell response in ALS4, which could be used to unravel disease mechanisms and as a potential biomarker of disease state."

Authors: Campisi L,Chizari S,Ho JSY,Gromova A,Arnold FJ,Mosca L,Mei X,Fstkchyan Y,Torre D,Beharry C,Garcia-Forn M,Jiménez-Alcázar M,Korobeynikov VA,Prazich J,Fayad ZA,Seldin MM,De Rubeis S,Bennett CL,Ostrow LW,Lunetta C,Squatrito M,Byun M,Shneider NA,Jiang N,La Spada AR,Marazzi I

**Year**  
2022

**Species**  
Mouse

**Dilution**  
1:200

**Frontiers in immunology**

**Expression of the Phosphatase Ppef2 Controls Survival and Function of CD8<sup>+</sup> Dendritic Cells.**

"12-5812-82 was used in Flow Cytometry to suggest that Ppef2 is crucial to support survival of immature CD8+ DCs, while Ppef2 down-regulation during DC-maturation limits T cell responses."

Authors: Zwick M,Ulas T,Cho YL,Ried C,Grosse L,Simon C,Bernhard C,Busch DH,Schultze JL,Buchholz VR,Stutte S,Brocker T

**Year**  
2020

**Species**  
Mouse

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

Miscellaneous PubMed (1)

**Journal of immunology (Baltimore, Md. : 1950)**

**Low-Affinity Memory CD8+ T Cells Mediate Robust Heterologous Immunity.**

"12-5812 was used in Binding experiments to investigate the impact of TCR-priming affinity on memory T cell populations following a graft rechallenge."

Authors: Krummey SM,Martinez RJ,Andargachew R,Liu D,Wagener M,Kohlmeier JE,Evavold BD,Larsen CP,Ford ML

**Year**  
2016

**Species**  
Mouse

More applications with references on thermofisher.com

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