CD3e Monoclonal Antibody (145-2C11), Functional Grade, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	145-2C11
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_468846

Applications	Tested Dilution	Publications
Western Blot (WB)	-	4 Publications
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	3 Publications
Flow Cytometry (Flow)	0.5 µg/test	99 Publications
ELISA (ELISA)	-	3 Publications
ChIP assay (ChIP)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	89 Publications
Blocking Assay (BLOCK)	-	2 Publications
T-Cell Activation (TCA)	-	3 Publications
In vitro Assay (IV)	-	8 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

Description: The 145-2C11 monoclonal antibody reacts with mouse CD3e, a 20 kDa subunit of the TCR complex. Along with the other CD3 subunits, gamma and delta, the epsilon chain is required for proper assembly, trafficking and surface expression of the TCR complex. CD3 is expressed by thymocytes in a developmentally regulated manner and by all mature T cells. Binding of 145-2C11 to TCR initiates the intracellular biochemical pathway resulting in cellular activation, proliferation, and

apoptosis depending on specific conditions utilized. 145-2C11 is commonly used as a phenotypic marker for mouse T cells.

Applications Reported: The 145-2C11 antibody has been reported for use in flow cytometric analysis. It has also been reported in cell activation and cell depletion. Please visit the Best Protocols webpage to view a protocol for in vitro T-cell activation.

Applications Tested: The 145-2C11 antibody has been tested by flow cytometric analysis of mouse splenocytes. 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

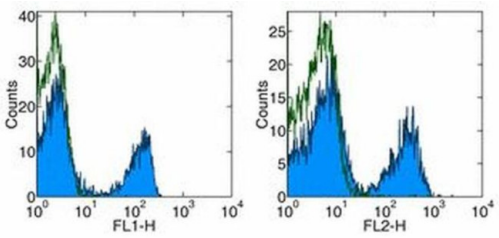
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

Product Images For CD3e Monoclonal Antibody (145-2C11), Functional Grade, eBioscience™



CD3e Antibody (16-0031-81) in Flow
Staining of mouse splenocytes with Anti-Mouse CD3e FITC (left) or PE (right). Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

219 References

Western Blot (4)

Cell reports

Tetraspanin CD53 controls T cell immunity through regulation of CD45RO stability, mobility, and function.

"16-0031-82 was used in Sample Preparation (Western Blotting) to reveal CD53 as a regulator of CD45 activity required for T cell immunity."

Authors: Dunlock VE,Arp AB,Singh SP,Charrin S,Nguyen V,Jansen E,Schaper F,Beest MT,Zuidscherwoude M,van Deventer SJ,Nakken B,Szodoray P,Demaria MC,Wright MD,Querol Cano L,Rubinstein E,van Spriel AB

Year 2022

Species Mouse

BioMed research international

Fluvastatin-Pretreated Donor Cells Attenuated Murine aGVHD by Balancing Effector T Cell Distribution and Function under the Regulation of KLF2.

"16-0031 was used in Western Blotting to conclude that administration of Fluvastatin to donor mice showed protective effects against recipient aGVHD when compared to untreated mice due to the retention of effector T cells in lymphoid organs accompanying with reduction of nonlymphatic infiltration and related inflammatory cytokines."

Authors: Zhao K,Tian Y,Wang J,Chen C,Pan B,Yan Z,Zhu S,Xu K

Year 2021

Species Mouse

View more WB references on thermofisher.com

Immunohistochemistry (5)

Basic research in cardiology

Inflammation shapes pathogenesis of murine arrhythmogenic cardiomyopathy.

"16-0031 was used in Immunohistochemistry to investigate if specific immune cell populations and chemokine expression profiles modulate inflammatory and repair processes throughout arrhythmogenic cardiomyopathy progression."

Authors: Lubos N,van der Gaag S,Gerçek M,Kant S,Leube RE,Krusche CA

Year 2020

Species Mouse

Dilution 1:100

Nature communications

Midkine activation of CD8^{+} T cells establishes a neuron-immune-cancer axis responsible for low-grade glioma growth.

"16-0031 was used in Immunohistochemistry-immunofluorescence to leverage genetically engineered mouse models and human biospecimens to define the axis in which neurons, T cells, and microglia interact to govern Neurofibromatosis-1 (NF1) low-grade glioma (LGG) growth."

Authors: Guo X,Pan Y,Xiong M,Sanapala S,Anastasaki C,Cobb O,Dahiya S,Gutmann DH

Year 2020

Species Mouse

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

IHC (P) (1) IHC (F) (3) Flow (99) ELISA (3) ChIP (1) FN (89) BLOCK (2) TCA (3) IV (8) Misc (1)