

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Rat, Mouse, Human
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	145-2C11
Conjugate	PE
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_465496

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	-	3 Publications
Flow Cytometry (Flow)	0.5 µg/test	159 Publications
Functional Assay (FN)	-	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.

Applications Tested: The 145-2C11 antibody has been tested by flow cytometric analysis of mouse thymocytes and 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

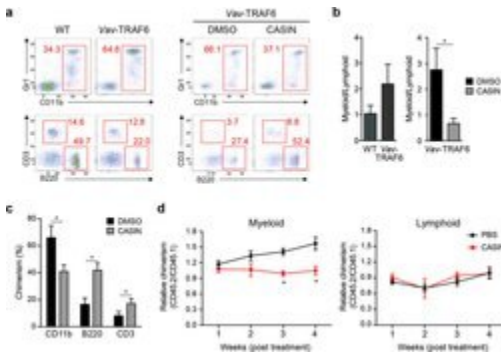
Excitation: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data

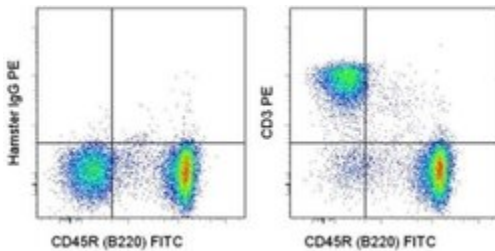
CD3e Antibody (12-0031-82)

Cdc42 contributes to HSPC defects in Vav-TRAF6 mice. (a) Flow cytometric analysis of donor-derived (gated on CD45.2 +) myeloid (CD11b +) and lymphoid (B220 + and CD3 +) proportions 8 weeks post transplantation for competitively transplanted WT (C57Bl/6) and Vav-TRAF6 LT-HSC cells, and for Vav-TRAF6 LT-HSC cells treated in vitro with CASIN (or DMSO) for 24 h. * P < 0.05. (b)



(b) Summary of independent experiments of myeloid and lymphoid proportions of donor-derived (gated on CD45.2 +) peripheral blood shown as a ratio (CD11b/[B220 + CD3]). (c) Peripheral blood myeloid (CD11b +) and lymphoid (B220 + and CD3 +) chimerism (CD45.2 +) of donor-derived cells determined 8 weeks after competitive transplantation with Vav-TRAF6 LT-HSC treated with CASIN. (n = 6 per group). * P < 0.005. (d) Donor-derived LT-HSC cells (CD45.2 +) from Vav-TRAF6 mice and competitor BM cells (CD45.1 +) were transplanted into lethally irradiated recipient mice (CD45.1 +). 3 month post-secondary transplantation, the recipients were treated with 30 mg/kg CASIN and vehicle control (PBS) for 16 d. Ratio of donor-derived (gated on CD45.2 +) and competitor-derived (gated on CD45.1 +) myeloid (CD11b) and lymphoid (CD3 and B220) cells was determined by flow cytometry 4 weeks post-CASIN treatment in vivo . Donor-derived chimerism is normalized (1.0) for each mouse at week 1 (n = 5 per group). * P = 0.007. Data are from two experiments (b - d ; means and s.e.m.). Cell treatment validation info.

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



CD3e Antibody (12-0031-82) in Flow

Staining of C57Bl/6 splenocytes with 0.25 μg of Armenian Hamster IgG Isotype Control PE (Product # 12-4888-81) (blue histogram) or 0.25 μg of Anti-Mouse CD3e PE (purple histogram). Total viable cells were used for analysis.

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Immunohistochemistry (Frozen) (3)

Infection and immunity

Immunization with apoptotic phagocytes containing *Histoplasma capsulatum* activates functional CD8(+) T cells to protect against histoplasmosis.

"12-0031 was used in Immunofluorescence on frozen tissues to investigate the effect of immunisation with apoptotic phagocytes containing heat-killed *Histoplasma*, showing that it activates functional CD8(+) T cells to protect against histoplasmosis."

Authors: Hsieh SH, Lin JS, Huang JH, Wu SY, Chu CL, Kung JT, Wu-Hsieh BA

Species
Mouse

Dilution
Not Cited

Year
2011

International journal of cancer

HSP70 vaccine in combination with gene therapy with plasmid DNA encoding sPD-1 overcomes immune resistance and suppresses the progression of pulmonary metastatic melanoma.

Authors: Geng H, Zhang GM, Xiao H, Yuan Y, Li D, Zhang H, Qiu H, He YF, Feng ZH

Species
Not Applicable

Dilution
Not Cited

Year
2006

[View more IHC \(F\) references on thermofisher.com](#)

Flow Cytometry (159)

Journal of translational medicine

Excessive proliferation and impaired function of primitive hematopoietic cells in bone marrow due to senescence post chemotherapy in a T cell acute lymphoblastic leukemia model.

"12-0031 was used in Flow cytometry/Cell sorting to conclude that primitive hematopoietic cells in bone marrow enter proliferation earlier than leukemic cells after chemotherapy, and gradually lose their regenerative capacity partly by senescence due to accelerated cycling."

Authors: Jiang C, Hu X, Wang L, Cheng H, Lin Y, Pang Y, Yuan W, Cheng T, Wang J

Species
Mouse

Dilution
Not Cited

Year
2015

Biology of reproduction

Sertoli cell-specific deletion of the androgen receptor compromises testicular immune privilege in mice.

"Published figure using CD3e monoclonal antibody (Product # 12-0031-82) in Flow Cytometry"

Authors: Meng J, Greenlee AR, Taub CJ, Braun RE

Species
Not Applicable

Dilution
Not Cited

Year
2011

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More applications with references on thermofisher.com

FN (1)

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