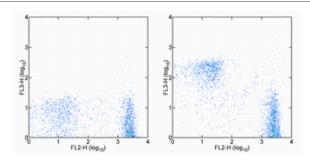


# Anti-Mouse CD3e PE-Cyanine7

Catalog Number: 25-0031 Also Known As:CD3 epsilon

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57BL/6 splenocytes with Anti-Human/Mouse CD45R (B220) PE (cat. 12-0452) and 0.5 ug of Armenian Hamster IgG Isotype Control PE-Cyanine7 (cat. 25-4888) (left) or 0.5 ug of Anti-Mouse CD3e PE-Cyanine7 (right). Cells in the lymphocyte gate were used for analysis.

#### **Product Information**

Contents: Anti-Mouse CD3e PE-Cyanine7

REF Catalog Number: 25-0031 Clone: 145-2C11

Concentration: 0.2 mg/mL

Host/Isotype: Armenian Hamster IgG

Formulation: aqueous buffer, 0.09% sodium azide, may contain

carrier protein/stabilizer

**Temperature Limitation:** Store at 2-8°C. Do not freeze. Light sensitive material. This Cyanine7 tandem dye is sensitive to photo-induced oxidation. Protect this reagent from light during

storage, handling & experimental procedures.

■ Batch Code: Refer to Vial

☐ Use By: Refer to Vial

l ∖ Caution, contains Azide

## 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

This 145-2C11 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. 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.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) 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.

#### References

Geng H, Zhang GM, Xiao H, Yuan Y, Li D, Zhang H, Qiu H, He YF, Feng ZH. HSP70 vaccine in combination with gene therapy with plasmid DNA encoding sPD-1 overcomes immune resistance and suppresses the progression of pulmonary metastatic melanoma. Int J Cancer. 2006 Jun 1;118(11):2657-64. (145-2C11, IHC frozen, PubMed)

Krieg C, Han P, Stone R, Goularte OD, Kaye J. Functional analysis of B and T lymphocyte attenuator engagement on CD4+ and CD8+ T cells. J Immunol. 2005 Nov 15;175(10):6420-7. (145-2C11, FA, PubMed)

Takeuchi A, Usui Y, Takeuchi M, Hattori T, Kezuka T, Suzuki J, Okunuki Y, Iwasaki T, Haino M, Matsushima K, Usui M. CCR5-deficient mice develop experimental autoimmune uveoretinitis in the context of a deviant effector response. Invest Ophthalmol Vis Sci. 2005 Oct;46(10):3753-

60. (145-2C11, IHC frozen, PubMed)

Schuchert MJ, Wright RD, Colson YL. Characterization of a newly discovered T-cell receptor beta-chain heterodimer expressed on a CD8+ bone marrow subpopulation that promotes allogeneic stem cell engraftment. Nat Med. 2000 Aug;6(8):904-9. (145-2C11, WB and IP)

Kearse KP. Calnexin associates with monomeric and oligomeric (disulfide-linked) CD3delta proteins in murine T lymphocytes. J Biol Chem. 1998 Jun 5;273(23):14152-7. (145-2C11, IP and WB)

Samelson LE, O'Shea JJ, Luong H, Ross P, Urdahl KB, Klausner RD, Bluestone J. T cell antigen receptor phosphorylation induced by an antireceptor antibody. J Immunol. 1987 Oct 15;139(8):2708-14.

Leo O, Foo M, Sachs DH, Samelson LE, Bluestone JA. Identification of a monoclonal antibody specific for a murine T3 polypeptide. Proc Natl Acad Sci U S A. 1987 Mar;84(5):1374-8

#### **Related Products**

12-0452 Anti-Human/Mouse CD45R (B220) PE (RA3-6B2) 25-4888 Armenian Hamster IgG Isotype Control PE-Cyanine7 (eBio299Arm)

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