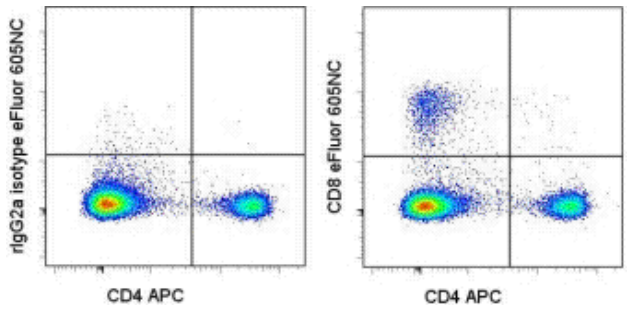
Anti-Mouse CD8a eFluor® 605NC

Catalog Number: 93-0081
Also Known As:CD8 alpha, Ly-2, Ly-35, Ly-B, Lyt-2
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of BALB/c splenocytes with Anti-Mouse CD4 APC (cat. 17-0041) and Rat IgG2a K Isotype Control eFluor® 605NC (cat. 93-4321) (left) or Anti-Mouse CD8a eFluor® 605NC (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse CD8a eFluor® 605NC
REF **Catalog Number:** 93-0081
Clone: 53-6.7
Concentration: 5 uL
Host/Isotype: Rat IgG2a, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Light sensitive material. This product is guaranteed for 6 months upon receipt when stored properly.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The 53-6.7 monoclonal antibody reacts with the mouse CD8a molecule. CD8a is an approximately 32-34 kDa cell surface receptor expressed either as a heterodimer with the CD8 beta chain (CD8 alpha beta) or as a homodimer (CD8 alpha alpha). A majority of thymocytes and a subpopulation of mature alpha beta TCR T cells express CD8 alpha beta while gamma delta; TCR T cells, a subpopulation of intestinal intraepithelial lymphocytes (IELs) and dendritic cells express CD8 alpha alpha. CD8 binds to MHC class I and through its association with protein tyrosine kinase p56lck plays a role in T cell development and activation of mature T cells.

Applications Reported

This 53-6.7 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 53-6.7 antibody has been pre-titrated and tested by flow cytometric analysis of mouse splenocytes. This can be used at 5 µL per test. A test is defined as the amount 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.

The isotype control eFluor 605NC rat IgG2a (cat. 93-4321) should be used at 5 µl/test.

Laser/Filter Recommendation: When using eFluor 605NC, we recommend excitation with the 405nm violet laser with an appropriate filter set, such as the 595LP dichroic mirror with the 605/40 bandpass filter. An acceptable alternative is the 610/20 bandpass filter. For instruments not equipped with a violet laser, the eFluor 605NC is also excited by the 488 nm blue laser and can be used as a PE-Texas Red alternative.

Fixation Recommendation: When fixing samples that have been stained with nanocrystal reagents, we recommend keeping the total volume at approximately 200 µL of IC Fixation Buffer (cat. 00-8222) and the exposure time 30-60 minutes to preserve the optimal fluorescent signal from the nanocrystal reagent.

For answers about fixation and other questions, please refer to Nanocrystal Frequently Asked Questions or contact eBioscience Technical Support.

References

Mochimaru H, Usui T, Yaguchi T, Nagahama Y, Hasegawa G, Usui Y, Shimmura S, Tsubota K, Amano S, Kawakami Y, Ishida S. Suppression of alkali burn-induced corneal neovascularization by dendritic cell vaccination targeting VEGF receptor 2. Invest Ophthalmol Vis Sci. 2008 May;49 (5):2172-7. (**53-6.7**, in vivo depletion, PubMed)

Yang Z, Day YJ, Toufektsian MC, Xu Y, Ramos SI, Marshall MA, French BA, Linden J. Myocardial infarct-sparing effect of adenosine A2A receptor

activation is due to its action on CD4+ T lymphocytes. Circulation. 2006 Nov 7;114(19):2056-64. (**53-6.7**, in vivo depletion, PubMed)

Taylor JL, Ordway DJ, Troudt J, Gonzalez-Juarrero M, Basaraba RJ, Orme IM. Factors associated with severe granulomatous pneumonia in Mycobacterium tuberculosis-infected mice vaccinated therapeutically with hsp65 DNA. Infect Immun. 2005 Aug;73(8):5189-93. (**53-6.7**, IHC frozen)

Grabbe S, Varga G, Beissert S, Steinert M, Pendl G, Seeliger S, Bloch W, Peters T, Schwarz T, Sunderkötter C, Scharffetter-Kochanek K. Beta2 integrins are required for skin homing of primed T cells but not for priming naïve T cells. J Clin Invest. 2002 Jan;109(2):183-92. (**53-6.7**, IHC frozen)

Ledbetter JA, Rouse RV, Micklem HS, Herzenberg LA. T cell subsets defined by expression of Lyt-1,2,3 and Thy-1 antigens. Two-parameter immunofluorescence and cytotoxicity analysis with monoclonal antibodies modifies current views. J Exp Med. 1980 Aug 1;152(2):280-95.

Ledbetter, J. A. and L. A. Herzenberg. Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens. Immunol Rev. 1979;47:63-90.

Related Products

00-4222 Flow Cytometry Staining Buffer
17-0041 Anti-Mouse CD4 APC (GK1.5)
93-4321 Rat IgG2a K Isotype Control eFluor® 605NC (eBR2a)

Legal

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