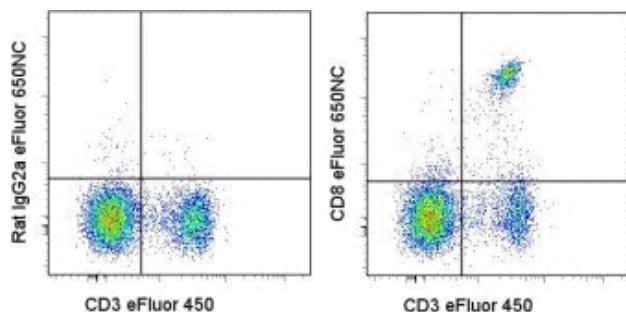


## Anti-Mouse CD8a eFluor® 650NC

**Catalog Number:** 95-0081

**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 C57BL/6 splenocytes with Anti-Mouse CD3e eFluor® 450 (cat. 48-0032) and Rat IgG2a K Isotype Control eFluor® 650NC (cat. 95-4321) (left) or Anti-Mouse CD8a eFluor® 650NC (right). Total viable cells were used for analysis.

### Product Information

**Contents:** Anti-Mouse CD8a eFluor® 650NC

**REF** **Catalog Number:** 95-0081

**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 uL per test. A test is defined as the amount of antibody that will stain a cell sample in a final volume of 100 uL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

The Isotype Control Rat IgG2a eFluor® 650NC (cat. 95-4321) should be used at 5 uL/test.

**Laser/Filter Recommendation:** When using eFluor 650NC, we recommend excitation with the 405nm violet laser with an appropriate filter set, such as the 630 LP dichroic mirror with the 660/40 bandpass filter. The eFluor 650NC can be minimally excited off of the 633 nm laser, and because its peak emission is 650nm, it will require some compensation out of the APC detector.

**Fixation Recommendation:** When fixing samples that have been stained with nanocrystal reagents, we recommend keeping the total volume at approximately 200 uL. (100 uL cells + 100 uL IC Fixation Buffer (cat. 00-8222)) and the exposure time at 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

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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

48-0032 Anti-Mouse CD3 eFluor® 450 (17A2)

93-0041 Anti-Mouse CD4 eFluor® 605NC (GK1.5)

95-4321 Rat IgG2a K Isotype Control eFluor® 650NC (eBR2a)

#### **Legal**

Under patent number: US 7,939,170 and additional pending patent application(s)

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