

Alexa Fluor® 647 anti-mouse CD45

Catalog # / Size: 1115620 / 100 µg
1115615 / 25 µg

Clone: 30-F11

Isotype: Rat IgG2b, κ

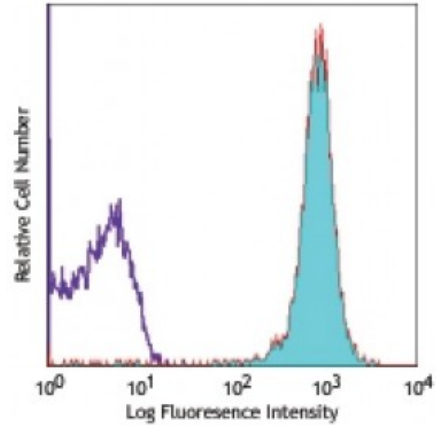
Immunogen: Mouse thymus or spleen

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5

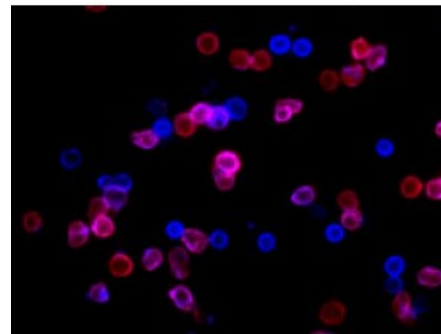


C57BL/6 mouse splenocytes stained with 30-F11 Alexa Fluor® 647

Applications:

Applications: Immunofluorescence

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 microg per 10⁶ cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for other applications.



C57 mouse bone marrow cells were fixed with 2% paraformaldehyde (PFA), and then stained with 10 microg/ml of CD11b (clone M1/70) Brilliant Violet 510™ (red) and 10 microg/ml of CD45 (clone 30-F11) Alexa Fluor® 647 (blue) for 30 minutes at ro

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

Application Notes: Clone 30-F11 reacts with all isoforms and both CD45.1 and CD45.2 alloantigens of CD45.

Additional reported applications (for relevant formats) include: immunoprecipitation³, complement-dependent cytotoxicity^{1,5}, immunohistochemistry (acetone-fixed frozen sections, zinc-fixed paraffin-embedded sections and formalin-fixed paraffin-embedded sections)^{4,6} and Western blotting⁷. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 103120).

- Application References:**
1. Podd BS, *et al.* 2006. *J. Immunol.* 176:6532. (FC, CMCD) [PubMed](#)
 2. Haynes NM, *et al.* 2007. *J. Immunol.* 179:5099. (FC)
 3. Ledbetter JA, *et al.* 1979. *Immunol. Rev.* 47:63. (IP)

4. Simon DI, *et al.* 2000. *J. Clin. Invest.* 105:293. (IHC)
 5. Seaman WE. 1983. *J. Immunol.* 130:1713. (CMCD)
 6. Cornet A, *et al.* 2001. *P. Natl. Acad. Sci. USA* 98:13306. (IHC)
 7. Tsuboi S and Fukuda M. 1998. *J. Biol. Chem.* 273:30680. (WB) [PubMed](#)
 8. Liu F, *et al.* 2012. *Blood.* 119:3295. [PubMed](#)
 9. Pelletier AN, *et al.* 2012. *J. Immunol.* 188:5561. [PubMed](#)
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Description: CD45 is a 180-240 kD glycoprotein also known as the leukocyte common antigen (LCA), T200, or Ly-5. It is a member of the protein tyrosine phosphatase (PTP) family, expressed on all hematopoietic cells except mature erythrocytes and platelets. There are different isoforms of CD45 that arise from variable splicing of exons 4, 5, and 6, which encode A, B, and C determinants, respectively. CD45 plays a key role in TCR and BCR signal transduction. These isoforms are very specific to the activation and maturation state of the cell as well as cell type. The primary ligands for CD45 are galectin-1, CD2, CD3, CD4, TCR, CD22, and Thy-1.

- Antigen**
- References:**
1. Barclay A, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
 2. Trowbridge IS, *et al.* 1993. *Annu. Rev. Immunol.* 12:85.
 3. Kishihara K, *et al.* 1993. *Cell* 74:143.
 4. Pulido R, <