

**APC/Fire™ 750 anti-mouse CD45**

**Catalog # / Size:** 1338570 / 100 µg  
1338565 / 25 µg

**Clone:** I3/2.3

**Isotype:** Rat IgG2b

**Immunogen:** Mouse lymphoma cell line

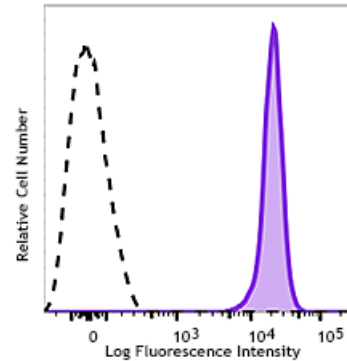
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

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

**Workshop Number:** 750 under optimal conditions.

**Concentration:** 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with CD45 (clone I3/2.3) APC/Fire™ 750 (filled histogram) or Rat IgG2b APC/Fire™ 750 isotype control (open histogram).

**Applications:**

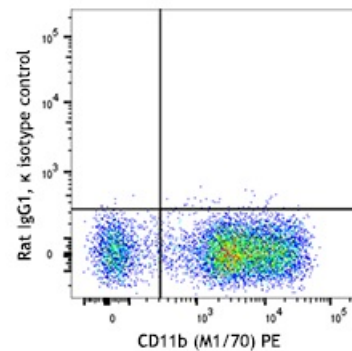
**Applications:** Flow Cytometry

**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 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraffin embedded sections<sup>1</sup> and frozen tissue sections<sup>2</sup>.

**Application References:** 1. Kliment C, et al. 2009. *J. Mol. Cell Cardiol.* 47:730. (IHC)  
2. Reynolds JM, et al. 2007. *J. Immunol.* 179:313. (IHC)



C57BL/6 mouse bone marrow cells were stained with CD150 (SLAM) (clone TC15-12F12.2) APC/Fire™ 750 (filled histogram) or rat IgG2a, κ APC/Fire™ 750 isotype control (open histogram).

**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 alternative 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 and Thomas ML. 1994. *Annu. Rev. Immunol.* 12:85.
3. Kishihara K, *et al.* 1993. *Cell* 74:143.
4. Pulido R, *et al.* 1988. *J. Immunol.* 140:3851.