

Alexa Fluor® 700 anti-mouse CD45

Catalog # / Size: 1338580 / 100 µg
1338575 / 25 µg

Clone: I3/2.3

Isotype: Rat IgG2b

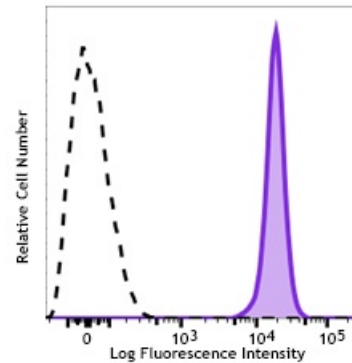
Immunogen: Mouse lymphoma cell line

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.

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

Concentration: 0.5 mg/ml



C57BL/6 mouse splenocytes were stained with CD45 (clone I3/2.3) Alexa Fluor® 700 (filled histogram) or rat IgG2b Alexa Fluor® 700 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.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraffin embedded sections¹ and frozen tissue sections².

- Application 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.

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.