

**Pacific Blue™ anti-mouse CD45**

**Catalog # / Size:** 1115625 / 25 µg  
1115630 / 100 µg

**Clone:** 30-F11

**Isotype:** Rat IgG2b, κ

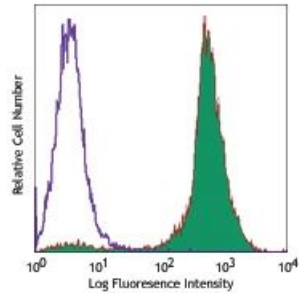
**Immunogen:** Mouse thymus or spleen

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™ .

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

**Concentration:** 0.5



C57BL/6 mouse splenocytes stained with Pacific Blue™ 30-F11

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤ 0.25 microg per 10<sup>6</sup> cells in 100 microL volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**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: immunoprecipitation<sup>3</sup>, complement-dependent cytotoxicity<sup>1,5</sup>, immunohistochemistry (acetone-fixed frozen sections, zinc-fixed paraffin-embedded sections and formalin-fixed paraffin-embedded sections)<sup>4,6</sup> and Western blotting<sup>7</sup>. 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](#)

**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, <