Product Data Sheet

Purified anti-mouse CD45

Catalog # / Size: 1115510 / 500 μg

1115505 / 50 μg

Clone: 30-F11

Isotype: Rat IgG2b, κ

Immunogen: Mouse thymus or spleen

Reactivity: Mouse

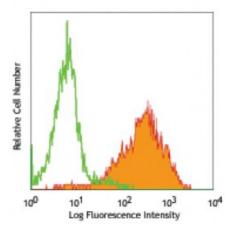
Preparation: The antibody was purified by affinity

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



BALB/c splenocytes stained with 30-F11 purified, followed by anti-rat IgG FITC

Applications:

Applications: Other

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 10^6 cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each

application.

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 paraffinembedded sections and formalin-fixed paraffin-embedded sections) 4,6 and Western blotting 7 . The LEAF $^{\text{TM}}$ 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, <