

## APC/Cy7 anti-rat CD45

**Catalog # / Size:** 202216 / 100 µg

**Clone:** OX-1

**Isotype:** Mouse IgG1, κ

**Immunogen:** Enriched glycoprotein fraction from Wistar rat thymocytes

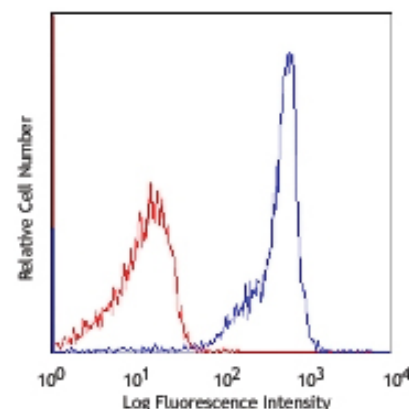
**Reactivity:** Rat

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody.

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

**Concentration:** 0.2 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



LOU rat splenocytes stained with OX-1 APC/Cy7

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>1</sup>, immunofluorescence microscopy (acetone fixed, ammonium-thiocyanate separated epidermal sheets)<sup>2</sup>, immunohistochemistry of acetone<sup>3</sup>-, isopentane<sup>4</sup>-, PLP<sup>5</sup>-, and n-hexane<sup>6</sup> fixed frozen sections and zinc-fixed paraffin-embedded sections, and partial inhibition of NK cell lysis of syngeneic tumor cell lines<sup>1</sup>.

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- Application References:**
1. Giezeman-Smits KM, *et al.* 1999. *J. Immunol.* 163:71. (IP)
  2. Elbe A, *et al.* 1994. *J. Invest. Dermatol.* 102:74. (IF)
  3. Kouwenhoven E, *et al.* 2001. *Kidney Int.* 59:1142. (IHC)
  4. Martin A, *et al.* 1995 *Clin. Exp. Immunol.* 22:283. (IHC)
  5. Sayegh MH, *et al.* 1995 *J. Exp. Med.* 181:186. (IHC)
  6. Morioka Y, *et al.* 2000. *Kidney Int.* 60:2192. (IHC)
  7. Nakagawa P, *et al.* 2012. *Am J Physiol Heart Circ Physiol.* 303:1114. PubMed.

**Description:** CD45 is a 180-220 kD protein also known as leukocyte common antigen (LCA). It is a protein tyrosine phosphatase with multiple isoforms differing as a result of alternative splicing of the extracellular domain and glycosylation. CD45 is expressed on all hematopoietic cells except erythrocytes and platelets; isoform expression depends on cell type, activation state, and cell maturation. CD45 functions in signal transduction through T and B cell antigen receptors. CD45 has been shown to interact with various proteins including galectin-1, CD2, CD3, and CD4. The OX-1 antibody has been shown to partially inhibit NK cell-mediated lysis of syngeneic tumor cells *in vitro*.

- Antigen References:**
1. Sunderland CA, *et al.* 1979. *Eur. J. Immunol.* 9:155.
  2. Woollett GR, *et al.* 1985. *Eur. J. Immunol.* 15:168.

**Related Products:**

**Product**  
 APC/Cy7 Mouse IgG1, κ Isotype Ctrl  
 Cell Staining Buffer  
 RBC Lysis Buffer (10X)

**Clone**  
 MOPC-21

**Application**  
 FC, ICFC  
 FC, ICC, ICFC  
 FC, ICFC



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