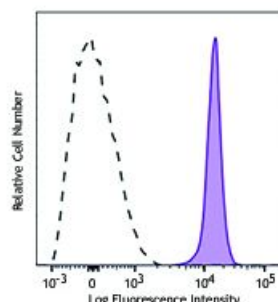


APC/Fire™ 750 anti-rat CD45

Catalog # /	1611105 / 25 µg
Size:	1611110 / 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/Fire™
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Workshop Number:	750 under optimal conditions.
Concentration:	0.2 mg/ml



LOU rat splenocytes were stained with CD45 (clone OX-1) APC/Fire™ 750 (filled histogram) or mouse IgG1, κ 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 ≤0.5 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: immunoprecipitation¹, immunofluorescence microscopy (acetone fixed, ammonium-thiocyanate separated epidermal sheets)², immunohistochemistry of acetone³-, isopentane⁴-, PLP⁵-, and n-hexane⁶ fixed frozen sections and paraffin-embedded sections^{7,8}, and partial inhibition of NK cell lysis of syngeneic tumor cell lines¹.

- 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. Ng YY, *et al.* 2005. *Kidney Int.* 94:S83. (IHC-P)
 8. Huang XR, *et al.* 2003. *JASN.* 14:1738. (IHC-P)

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