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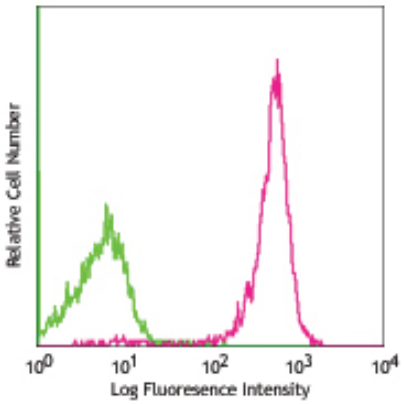
Product Data Sheet

Alexa Fluor® 488 anti-rat CD45

Catalog # / Size: 202210 / 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 Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration: 0.5 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 Alexa Fluor® 488

Applications:

Applications: FC - *Quality tested*
IHC, IF - *Reported in the literature*

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 *≤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® 488 has a maximum emission of 519 nm when it is excited at 488 nm.*
*** Alexa Fluor® 488 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 488 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.*

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

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)

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. Woolett GR, et al. 1985. Eur. J. Immunol.. 15:168.

Related Products:

Product	Clone	Application
Cell Staining Buffer		FC, ICC, ICFC
Alexa Fluor® 488 Mouse IgG1, κ *Isotype Ctrl (FC)*	*MOPC-21*	*FC, IF*

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