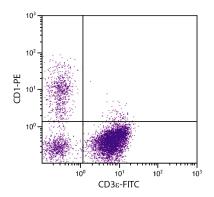




Mouse Anti-Porcine CD1

Cat. No.	Format	Size
4500-01	Purified (UNLB)	0.5 mg
4500-02	Fluorescein (FITC)	0.5 mg
4500-08	Biotin (BIOT)	0.5 mg
4500-09	R-phycoerythrin (PF)	0.1 ma



Porcine peripheral blood lymphocytes were stained with Mouse Anti-Porcine CD1-PE (SB Cat. No. 4500-09) and Mouse Anti-Porcine CD3ε-FITC (SB Cat. No. 4510-02).

Overview

Clone 76-7-4

Isotype Mouse (BALB/c) IgG_{2a}κ

Immunogen Fresh dd miniature swine thymocytes

Specificity Porcine CD1; Mr 40 & 11 kDa

Alternate Name(s) CD1c, CD1.1

Description

Porcine CD1 is a type I transmembrane glycoprotein and a member of the immunoglobulin superfamily of cell surface receptors. It has a domain organization similar to that of MHC class I molecules and is expressed in association with β_2 -microglobulin. CD1 is found on B cells, macrophages, and immature thymocytes. There is evidence for a role of CD1 in presentation of lipids and peptides to T cells.

Applications

FC – Quality tested ^{1,2,5,7-11}
IHC-FS – Reported in literature ²⁻⁶
ICC – Reported in literature ⁷
IP – Reported in literature ¹
CMCD – Reported in literature ¹

Working Dilutions

Flow Cytometry FITC and BIOT conjugates $\leq 1 \mu g/10^6 \text{ cells}$

PE conjugate $\leq 0.2 \mu g/10^6 \text{ cells}$

For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is

appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No
 preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

- 1. Pescovitz MD, Lunney JK, Sachs DH. Preparation and characterization of monoclonal antibodies reactive with porcine PBL. J Immunol. 1984;133:368-375. (Immunogen, FC, IP, CMCD)
- 2. Denham S, Zwart RJ, Whittall JT, Pampusch M, Corteyn AH, Bianchi AT, et al. Monoclonal antibodies putatively identifying porcine B cells. Vet Immunol Immunopathol. 1998;60:317-28. (IHC-FS, FC)
- 3. Pauly T, König M, Thiel H, Saalmüller A. Infection with classical swine fever virus: effects on phenotype and immune responsiveness of porcine T lymphocytes. J Gen Virol. 1998;79:31-40. (IHC-FS)
- 4. Yamada K, Shimizu A, Ierino FL, Utsugi R, Barth RN, Esnaola N, et al. Thymic transplantation in miniature swine. I. Development and function of the "thymokidney". Transplantation. 1999;68:1684-92. (IHC-FS)
- 5. Diaz-San Segundo F, Moraes MP, de Los Santos T, Dias CC, Grubman MJ. Interferon-induced protection against foot-and-mouth disease virus infection correlates with enhanced tissue-specific innate immune cell infiltration and interferon-stimulated gene expression. J Virol. 2010;84:2063-77. (IHC-FS, FC)
- 6. Debeer S, Le Luduec J, Kaiserlian D, Laurent P, Nicolas JF, Dubois B, et al. Comparative histology and immunohistochemistry of porcine versus human skin. Eur J Dermatol. 2013;23:456-66. (IHC-FS)
- 7. Nfon CK, Dawson H, Toka FN, Golde WT. Langerhans cells in porcine skin. Vet Immunol Immunopathol. 2008;126:236-47. (ICC, FC)
- 8. Layton DS, Bean AG, Dodge NM, Strom AD, Sandrin MS, Ierino FL. Differential cytokine expression and regulation of human anti-pig xenogeneic responses by modified porcine dendritic cells. Xenotransplantation. 2008;15:257-67. (FC)
- 9. Facci MR, Auray G, Buchanan R, van Kessel J, Thompson DR, Mackenzie-Dyck S, et al. A comparison between isolated blood dendritic cells and monocyte-derived dendritic cells in pigs. Immunology. 2010;129:396-405. (FC)
- 10. Chen L, Dong X, Shen H, Zhao M, Ju C, Yi L, et al. Classical swine fever virus suppresses maturation and modulates functions of monocyte-derived dendritic cells without activating nuclear factor kappa B. Res Vet Sci. 2012;93:529-37. (FC)
- 11. Leclercq C, Prunier A, Thomas F, Merlot E. Neonatal surgical castration of male pigs reduces thymic growth but has moderate consequences on thymocytes. J Anim Sci. 2014;92:2415-21. (FC)

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