Technical Data Sheet

PE Mouse Anti-Pig CD8b

Product Information

 Material Number:
 561484

 Size:
 50 μg

 Concentration:
 0.2 mg/ml

 Clone:
 295/33-25

 Immunogen:
 Pig thymocytes

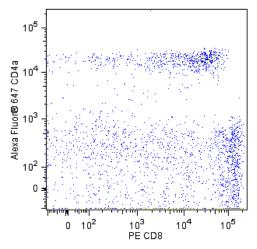
Isotype: Mouse (BALB/c) IgG2a, κ

Reactivity: QC Testing: Pig

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 295/33-25 monoclonal antibody specifically binds to an epitope on the CD8 α chain, a 35 kDa antigen expressed on thymocytes, peripheral T lymphocytes, and NK cells. The CD8 molecule can exist as a 70 kDa homodimer, composed of α chains, or heterodimer, composed of an α and a β chain. Two peripheral CD8+ T-cell populations can be distinguished in the pig: CD8-bright CD4-negative CTL effectors/precursors and CD8-dull CD4-positive T-helper lymphocytes. Pig NK cells express CD8 (dull staining), CD2, MHC class II, LFA-1, and asialo-GM1; but not CD3, CD4, CD5, or CD6. mAb 295/33-25 was clustered as anti-CD8b at the First International Swine CD workshop.



CD8 expression on pig peripheral blood lymphocytes. Pig whole blood was stained simultaneously with Alexa Fluor® 647 Mouse Anti-Pig CD4a antibody (Cat. No. 561472) and PE Mouse Anti-Pig CD8 antibody (Cat. no. 561484). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). Two-color flow cytometric dot plots were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone	
555899	Lysing Buffer	100 ml	(none)	
554656	Stain Buffer (FBS)	500 ml	(none)	
561472	Alexa Fluor® 647 Mouse Anti-Pig CD4a	50 ug	74-12-4	

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Product Notices

- 1. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 3. An isotype control should be used at the same concentration as the antibody of interest.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References

Dato ME, Kim YB. Characterization and utilization of a monoclonal antibody inhibiting porcine natural killer cell activity for isolation of natural killer and killer cells. *J Immunol.* 1990; 144(11):4452-4462. (Biology)

Jonjic N, Jonjic S, Saalmuller A, Rukavina D, Koszinowski UH. Distribution of T-lymphocyte subsets in porcine lymphoid tissues. *Immunology*. 1987; 60(3):395-401. (Clone-specific: Immunohistochemistry)

Jonjic S, Koszinowski UH. Monoclonal antibodies reactive with swine lymphocytes. I. Antibodies to membrane structures that define the cytolytic T lymphocyte subset in the swine. *J Immunol.* 1984; 133(2):647-652. (Immunogen: Cytotoxicity, ELISA, Immunoprecipitation)

Pescovitz MD, Lowman MA, Sachs DH. Expression of T-cell associated antigens by porcine natural killer cells. *Immunology*. 1988; 65(2):267-271. (Biology) Saalmuller A, Aasted B, Canals A, et al. Analyses of mAb reactive with porcine CD8. *Vet Immunol Immunopathol*. 1994; 43(1-3):249-254. (Clone-specific: Immunoprecipitation)

Saalmuller A, Hirt W, Maurer S, Weiland E. Discrimination between two subsets of porcine CD8+ cytolytic T lymphocytes by the expression of CD5 antigen. Immunology. 1994; 81(4):578-583. (Biology)

Saalmuller A, Pauly T, Hohlich BJ, Pfaff E. Characterization of porcine T lymphocytes and their immune response against viral antigens. *J Biotechnol.* 1999; 73(2-3):223-233. (Biology)

Saalmuller A, Werner T, Fachinger V. T-helper cells from naive to committed. *Vet Immunol Immunopathol.* 2002; 87(3-4):137-145. (Biology) Zuckermann FA. Extrathymic CD4/CD8 double positive T cells. *Vet Immunol Immunopathol.* 1999; 72(1-2):55-66. (Biology)

Zuckermann FA, Pescovitz MD, Aasted B, et al. Report on the analyses of mAb reactive with porcine CD8 for the second international swine CD workshop. *Vet Immunol Immunopathol.* 1998; 60(3-4):291-303. (Biology)

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