

Technical Data Sheet

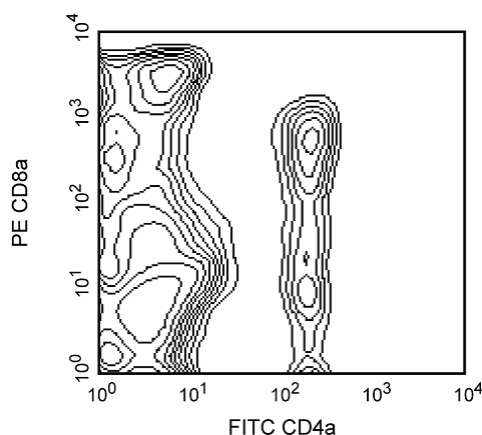
PE Mouse Anti-Pig CD8a

Product Information

Material Number:	559584
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	76-2-11
Immunogen:	dd miniature swine thymocytes
Isotype:	Mouse (BALB/c) IgG2a, κ
Reactivity:	QC Testing: Porcine
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 76-2-11 (also known as clone PT8) antibody reacts with 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 β chain. Cells which express the CD8 $\alpha\alpha$ homodimer display dimmer staining with mAb 76-2-11 than CD $\alpha\beta$ -expressing cells. The 76-2-11 mAb does not cross-react with human or bovine cells. Two peripheral CD8+ T-cell populations can be distinguished in the pig: CD8-bright CD4- CTL effectors/precursors and CD8-dull CD4+ 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 76-2-11 has been reported to partially inhibit *in vitro* cytotoxic activity of PBL to allogeneic leukocytes, but not NK-cell-mediated lysis, and to deplete CD8+ T cells *in vivo*. This clone was clustered as anti-CD8a at the First International Swine CD workshop.



CD8 expression on peripheral blood lymphocytes. Pig whole blood was stained simultaneously with PE-conjugated 76-2-11 and FITC-conjugated anti-pig CD4a 74-12-4 (Cat. No. 559585) monoclonal antibodies. Erythrocytes were lysed (BD Pharm Lyse™ lysis buffer, Cat. No. 555899), nonviable leukocytes were excluded by staining with 7-AAD (BD Via-Probe™ cell viability dye, Cat. No. 555816/555815), and lymphocytes were gated according to scatter profile. Flow cytometry was performed on a BD FACSCalibur™ flow cytometry 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
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Suggested Companion Products

Catalog Number	Name	Size	Clone
559585	FITC Mouse Anti-Pig CD4a	0.1 mg	74-12-4
555899	Lysing Buffer	100 ml	(none)
555816	Cell Viability Solution	100 tests	(none)
553457	PE Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. 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.

References

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