

Technical Data Sheet

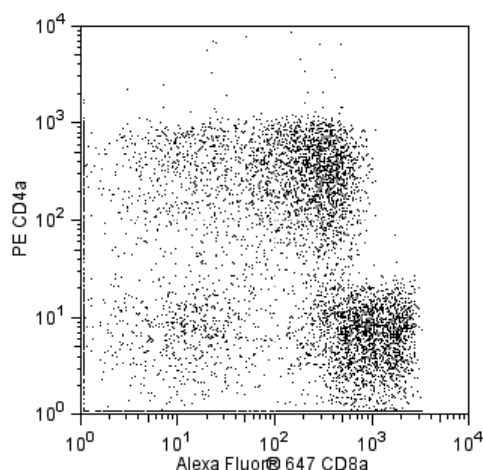
Alexa Fluor® 647 Mouse Anti-Pig CD8a

Product Information

Material Number:	561475
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	76-2-11
Immunogen:	dd miniature swine thymocytes
Isotype:	Mouse (BALB/c) IgG2a, κ
Reactivity:	QC Testing: Pig
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 76-2-11 (also known as clone PT8) monoclonal antibody specifically binds to an epitope on the CD8a 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 CD8αα homodimer display dimmer staining with mAb 76-2-11 than CDαβ-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.



Flow cytometric analysis of CD8 expression on pig peripheral blood lymphocytes. Pig whole blood was stained simultaneously with PE Mouse Anti-Pig CD4a antibody (Cat. No. 559586) and Alexa Fluor® 647 Mouse Anti-Pig CD8a antibody (Cat. no. 561475). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The two-color flow cytometric dot plot shows the expression of CD8 versus CD4 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 to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was 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)
559586	PE Mouse Anti-Pig CD4a	0.1 mg	74-12-4

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.
3. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
4. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
5. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
6. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

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