Technical Data Sheet

# FITC Mouse Anti-Pig CD8a

## Product Information

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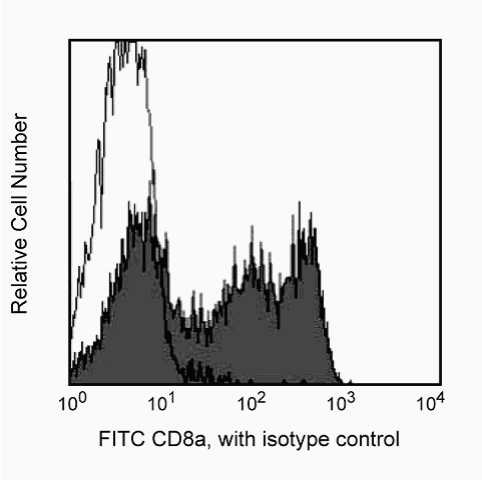
|---|---|
| **Material Number:** | **551303** |
| **Size:** | 0.1 mg |
| **Concentration:** | 0.5 mg/ml |
| **Clone:** | 76-2-11 |
| **Immunogen:** | dd miniature swine thymocytes |
| **Isotype:** | Mouse (BALB/c) IgG2a, κ |
| **Reactivity:** | QC Testing: Porcine |
| **Storage Buffer:** | Aqueous buffered solution containing ≤0.09% sodium azide. |

## Description

The 76-2-11 (also known as clone PT8) antibody reacts with an epitope on the CD8α 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.




***CD8 expression on peripheral blood lymphocytes.*** *Pig whole blood was stained with either FITC-conjugated 76-2-11 mAb (shaded histogram) or FITC-conjugated mouse Igg2a, kappa isotype control mAb G155-178 (Cat. No. 553456, open histogram). Erythrocytes were lysed (BD Pharm Lyse™ lysis buffer, Cat. No. 555899), non-viable 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 FITC under optimum conditions, and unreacted FITC was removed.
Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

**Application**

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| Flow cytometry | Routinely Tested |

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## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 553456 | FITC Mouse IgG2a, κ Isotype Control | 0.25 mg | G155-178 |
| 555899 | Lysing Buffer | 100 ml | (none) |
| 555816 | Cell Viability Solution | 100 tests | (none) |

## 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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