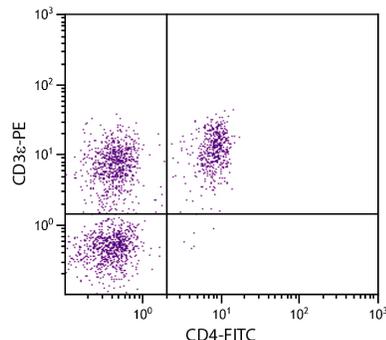




## Mouse Anti-Porcine CD3 $\epsilon$

Cat. No.	Format	Size
4511-01	Purified (UNLB)	0.5 mg
4511-02	Fluorescein (FITC)	0.5 mg
4511-08	Biotin (BIOT)	0.5 mg
4511-09	R-phycoerythrin (PE)	0.1 mg



Porcine peripheral blood lymphocytes were stained with Mouse Anti-Porcine CD3 $\epsilon$ -PE (SB Cat. No. 4511-09) and Mouse Anti-Porcine CD4-FITC (SB Cat. No. 4515-02).

### Overview

<b>Clone</b>	BB23-8E6 (BB23-8E6-2B3C)
<b>Isotype</b>	Mouse IgG <sub>2b</sub> K
<b>Immunogen</b>	Unknown
<b>Specificity</b>	Porcine CD3 $\epsilon$ ; Mr 24 kDa
<b>Alternate Name(s)</b>	N/A

### Description

Porcine CD3 $\epsilon$  is a member of the T-cell receptor-associated CD3 complex. It is found on a subpopulation of thymocytes and on all pig T lymphocytes. The monoclonal antibody BB23-8E6-2B3C is a immunoglobulin isotype switch variant of the BB23-8E6 clone which has been shown to be useful in immunoprecipitation, immunocytochemistry, and costimulation<sup>4</sup>.

### Applications

FC – Quality tested<sup>4-14</sup>  
 IHC-FS – Reported in literature<sup>1-3</sup>

### Working Dilutions

<b>Flow Cytometry</b>	FITC conjugate	$\leq 3 \mu\text{g}/10^6$ cells
	BIOT conjugate	$\leq 1 \mu\text{g}/10^6$ cells
	PE conjugate	$\leq 0.2 \mu\text{g}/10^6$ cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 $\mu\text{L}$ .		

**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/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> 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. 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)
2. Shimizu A, Yamada K, Meehan SM, Sachs DH, Colvin RB. Acceptance reaction: intragraft events associated with tolerance to renal allografts in miniature swine. *J Am Soc Nephrol*. 2000;11:2371-80. (IHC-FS)
3. Shimizu A, Yamada K, Sachs DH, Colvin RB. Mechanisms of chronic renal allograft rejection. II. Progressive allograft glomerulopathy in miniature swine. *Lab Invest*. 2002;82:673-85. (IHC-FS)
4. Pescovitz MD, Book BK, Aasted B, Dominguez J, Ezquerra A, Trebichavsky I, et al. Analyses of monoclonal antibodies reacting with porcine CD3: results from the Second International Swine CD Workshop. *Vet Immunol Immunopathol*. 1998;60:261-8. (FC, IP, ICC, Costim)
5. Nofrarias M, Manzanilla EG, Pujols J, Gibert X, Majó N, Segalés J, et al. Effects of spray-dried porcine plasma and plant extracts on intestinal morphology and on leukocyte cell subsets of weaned pigs. *J Anim Sci*. 2006;84:2735-42. (FC)
6. Toka FN, Nfon C, Dawson H, Golde WT. Natural killer cell dysfunction during acute infection with foot-and-mouth disease virus. *Clin Vaccine Immunol*. 2009;16:1738-49. (FC)
7. Kick AR, Tompkins MB, Flowers WL, Whisnant CS, Almond GW. Effects of stress associated with weaning on the adaptive immune system in pigs. *J Anim Sci*. 2012;90:649-56. (FC)
8. Mair KH, Essler SE, Patzl M, Storset AK, Saalmüller A, Gerner W. NKp46 expression discriminates porcine NK cells with different functional properties. *Eur J Immunol*. 2012;42:1261-71. (FC)
9. Reutner K, Leitner J, Essler SE, Witter K, Patzl M, Steinberger P, et al. Porcine CD27: identification, expression and functional aspects in lymphocyte subsets in swine. *Dev Comp Immunol*. 2012;38:321-31. (FC)
10. Hester SN, Comstock SS, Thorum SC, Monaco MH, Pence BD, Woods JA, et al. Intestinal and systemic immune development and response to vaccination are unaffected by dietary (1,3/1,6)-β-D-glucan supplementation in neonatal piglets. *Clin Vaccine Immunol*. 2012;19:1499-508. (FC)
11. Mair KH, Müllebner A, Essler SE, Duvigneau JC, Storset AK, Saalmüller A, et al. Porcine CD8α<sup>dim</sup>/NKp46<sup>high</sup> NK cells are in a highly activated state. *Vet Res*. 2013;44(1):13. (FC)
12. Thorum SC, Hester SN, Comstock SS, Monaco MH, Pence BD, Woods JA, et al. Dietary (1,3/1,6)-β-D-glucan decreases transforming growth factor β expression in the lung of the neonatal piglet. *Nutr Res*. 2013;33:322-31. (FC)
13. Ladinig A, Gerner W, Saalmüller A, Lunney JK, Ashley C, Harding JC. Changes in leukocyte subsets of pregnant gilts experimentally infected with porcine reproductive and respiratory syndrome virus and relationships with viral load and fetal outcome. *Vet Res*. 2014;45:128. (FC)
14. Franzoni G, Edwards JC, Kurkure NV, Edgar DS, Sanchez-Cordon PJ, Haines FJ, et al. Partial Activation of natural killer and γδ T cells by classical swine fever viruses is associated with type I interferon elicited from plasmacytoid dendritic cells. *Clin Vaccine Immunol*. 2014;21:1410-20. (FC)