Technical Data Sheet Biotin Mouse Anti-Pig CD16

Product Information

Material Number:	551395
Alternate Name:	Fcy Receptor IIIAa
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	FcG7
Immunogen:	Pig peripheral blood leukocytes
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Pig
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The FcG7 antibody reacts with CD16, the transmembrane α chain of Fc γ Receptor III (Fc γ RIIIA α). In the pig, Fc γ RIIIA α is expressed on NK cells, monocytes, granulocytes, and pulmonary alveolar macrophages. The FcG7 antibody induces redirected cytotoxic activity of NK cells and granulocytes against tumor cells.



Two-color analysis of CD16 expression on pig peripheral blood lymphocytes. Pig whole blood was stained with PE-conjugated anti- pig CD4a mAb 74-12-4 (Cat. no. 559586, both panels) and biotinylated mAb FcG7 (Right panel), followed by Streptavidin- FITC (Cat. No. 554060, both panels). Erythrocytes were lysed (PharmLyse™ Lysing Buffer, Cat. no. 555899), non-viable leukocytes were excluded by staining with 7-AAD (Via- Probe™, Cat. No. 555816/555815), and lymphocytes were gated according to their light-scatter profiles. Flow cytometry was performed on a FACSCalibur^a (BDIS, San Jose, CA).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application								
Flow cytometry			F	Routinely Tested				
BD Bioscie	nces							
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554060	FITC Streptavidin	0.5 mg	(none)
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

Aller SC, Cho D, Kim YB. Characterization of the cytolytic trigger molecules G7/PNK-E as a molecular complex on the surface of porcine phagocytes. Cell Immunol. 1995; 161(2):270-278. (Biology)

Dato ME, Wierda WG, Kim YB. A triggering structure recognized by G7 monoclonal antibody on porcine lymphocytes and granulocytes. *Cell Immunol.* 1992; 140(2):468-477.(Immunogen: Cytotoxicity)

Halloran PJ, Sweeney SE, Kim YB. Biochemical characterization of the porcine Fc gamma RIII alpha homologue G7. *Cell Immunol.* 1994; 158(2):400-413. (Biology)

Halloran PJ, Sweeney SE, Strohmeier CM, Kim YB. Molecular cloning and identification of the porcine cytolytic trigger molecule G7 as a Fc gamma RIII alpha (CD16) homologue. J Immunol. 1994; 153(6):2631-2641.(Biology)

Wierda WG, Johnson BD, Dato ME, Kim YB. Induction of porcine granulocyte-mediated tumor cytotoxicity by two distinct monoclonal antibodies against lytic trigger molecules (PNK-E/G7). *J Immunol.* 1993; 151(12):7117-7127.(Clone-specific: Cytotoxicity)