Datasheet: MCA6167F

Description:	MOUSE ANTI PIG CD33:FITC
Specificity:	CD33
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	5D5
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Pig

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen

Recombinant protein consisting in the two extracellular Ig-like domains of porcine Siglec-3

	fused to the Fc portion of human IgG1 (pSiglec- 3-Fc)
Specificity	**Mouse anti Pig CD33, clone 5D5** recognizes CD33, also known as Siglec-3. Sialic-acid-binding immunoglobulin-like lectin (Siglecs) are cell surface receptors belonging to the immunoglobulin superfamily and recognize terminal sialic acids present in complex oligosaccharides of glycoproteins or glycolipids. Siglecs are mainly expressed on the cells of the immune systems and play a regulatory role, modulating inflammatory and immune responses. Clone 5D5 was used to detect Siglec-3 expression on monocytes ($CD172a^{+}$ or $CD16^{hi}$ PBMCs), granulocytes ($CD52^{+}$ and $CD52^{-}$), and bone marrow. CD33 was also detected in lymph node, splenic, and alveolar macrophages, although at lower levels than on monocytes (Alvarez *et al.* 2015).
Flow Cytometry	Use 10ul of the suggested working dilution to label $1x10^{6}$ cells in 100ul
References	1. Bohorquez, J.A. *et al.* (2019) Identification of an Immunosuppressive Cell Population during Classical Swine Fever Virus Infection and Its Role in Viral Persistence in the Host. Viruses. 11 (9): 822. 2. Álvarez-Estrada, Á. *et al.* (2019) TLR2, Siglec-3 and CD163 expressions on porcine peripheral blood monocytes are increased during sepsis caused by *Haemophilus parasuis*. Comp Immunol Microbiol Infect Dis. 64: 31-39. 3. Poderoso, T. *et al.* (2020) Expression of Siglec-1, -3, -5 and -10 in porcine cDC1 and cDC2 subsets from blood, spleen and lymph nodes and functional capabilities of these cells. Dev Comp Immunol. 109: 103692. 4. Álvarez, B. *et al.* (2023) Porcine Macrophage Markers and Populations: An Update. Cells. 12 (16): 2103.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA6167F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	**Worldwide**	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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