Datasheet: MCA1971SBB700

Description:	MOUSE ANTI PIG CD16:StarBright Blue 700
Specificity:	CD16
Other names:	FcRIII
Format:	StarBright Blue 700
Product Type:	Monoclonal Antibody
Clone:	G7
Isotype:	IgG1
Quantity:	100 TESTS/0.5ml

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

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 StarBright Blue 700 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Blue 700	473	703

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
0.1% Pluronic F68
0.1% PEG 3350
0.05% Tween 20

Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
Immunogen	Porcine peripheral blood leucocytes
External Database Links	**UniProt:** Q28942 Related reagents **Entrez Gene:** 397684 FCGR3B Related reagents
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the mouse P3-X63-Ag8.653 myeloma cell line
Specificity	**Mouse anti Pig CD16, clone G7** recognizes porcine CD16 also known as Fc-gamma RIII or the low affinity IgG (Fc) receptor III. Clone G7 was clustered as CD16 at the Second International Workshop to Define Swine Cluster of Differentiation (CD) Antigens (Saalmuller *et al.* 1998). Mouse anti pig CD16 immunoprecipitates a protein of ~40 kDa from porcine neutrophils and NK cells (Wierda *et al.* 1993). Subsequent cloning and characterization of the G7 molecule indicated that G7 was the porcine homologue of Human CD16 (Halloran *et al.* 1994).
Flow Cytometry	Use 5µl of the suggested working dilution to label 0.5x10^6 cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
References	1. Wierda, W.G. *et al.* (1993) Two distinct porcine natural killer lytic trigger molecules as PNK-E/G7 molecular complex. Cell Immunol. 146 (2): 270-83. 2. Halloran, P.J. *et al.* (1994) Biochemical characterization of the porcine Fc gamma RIII alpha homologue G7. Cell Immunol. 158 (2): 400-13. 3. Sánchez, C. *et al.* (1999) The porcine 2A10 antigen is homologous to human CD163 and related to macrophage differentiation. J Immunol. 162 (9): 5230-7. 4. Terzic, S. *et al.* (2002) Immunophenotyping of leukocyte subsets in peripheral blood and palatine tonsils of prefattening pigs. Vet Res Commun. 26: 273 - 83. 5. Vincent, I.E. *et al.* (2003) Dendritic cells harbor infectious porcine circovirus type 2 in the absence of apparent cell modulation or replication of the virus. J Virol. 77: 13288 - 300. 6. Summerfield, A. *et al.* (2003) Porcine peripheral blood dendritic cells and natural interferon-producing cells. Immunology 110: 440-9. 7. Inman, C.F. *et al.* (2010) Rearing environment affects development of the immune system in neonates. Clin Exp Immunol. 160 (3): 431-9. 8. Inman, C.F. *et al.* (2010) Dendritic cells interact with CD4 T cells in intestinal mucosa. J Leukoc Biol. 88 (3): 571-8. 9. Devriendt, B. *et al.* (2010) Targeting of *Escherichia coli* F4 fimbriae to Fcgamma receptors enhances the maturation of porcine dendritic cells. Vet Immunol Immunopathol. 135 (3-4): 188-98.

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Further Reading

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Storage

This product is shipped at ambient temperature.
Store at +4°C. DO NOT FREEZE.
This product should be stored undiluted.

Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1971SBB700
Regulatory	For research purposes only

Product inquiries: www.bio-rad-antibodies.com/technical-support

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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