Datasheet: MCA1751F

BATCH NUMBER 163800

Description:	MOUSE ANTI PIG CD45RA:FITC
Specificity:	CD45RA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MIL13
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
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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 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	Cells isolated from porcine mesenteric lymph node
RRID	AB_323348
Specificity	**Mouse anti Pig CD45RA, clone MIL13,** recognizes an epitope contained in the portion of porcine CD45 encoded by exon A, CD45RA (Lunney *et al.* 2007). Mouse anti pig CD45RA, clone MIL13 recognizes both the 210 kDa RA CD45 isoform and the 226 kDa RAC isoform (Zuckermann *et al.* 2001). Clone MIL13 does not recognize the CD45RC or CD45RO isoforms.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Pakkanen, T.M. *et al.* (2000) Periadventitial lacZ gene transfer to pig carotid arteries using a biodegradable collagen collar or a wrap of collagen sheet with adenoviruses and plasmid-liposome complexes. J Gene Med. 2: 52-60. 2. Terzic, S. *et al.* (2002) Immunophenotyping of leukocyte subsets in peripheral blood and palatine tonsils of prefattening pigs. Vet Res Commun. 26: 273-83. 3. Bozić F *et al.* (2002) Recruitment of intestinal CD45RA+ and CD45RC+ cells induced by a candidate oral vaccine against porcine post-weaning colibacillosis. Vet Immunol Immunopathol. 86 (3-4): 137-46. 4. Schierack, P. *et al.* (2009) Effects of *Bacillus cereus* var. *toyoi* on immune parameters of pregnant sows. Vet Immunol Immunopathol. 127: 26-37. 5. Thierry, A. *et al.* (2012) Identification of invariant natural killer T cells in porcine peripheral blood. Vet Immunol Immunopathol. 149 (3-4): 272-9. 6. Suzuki, S. *et al.* (2016) Generation and characterization of RAG2 knockout pigs as animal model for severe combined immunodeficiency. Vet Immunol Immunopathol. 178: 37-49. 7. López, E. *et al.* (2019) Identification of very early inflammatory markers in a porcine myocardial infarction model. BMC Vet Res. 15 (1): 91. 8. Li, K.*et al.* (2019) Generation of porcine monoclonal antibodies based on single cell technologies. Vet Immunol Immunopathol. 215: 109913. 9. Forner, R. *et al.* (2021) Distribution difference of colostrum-derived B and T cells subsets in gilts and sows. PLoS One. 16 (5): e0249366. 10. Ogihara, K. *et al.* (2022) A porcine lymphoma-derived cell line co-expressing IgM, IgG and IgA. J Vet Med Sci. 84 (6): 760-5. 11. Zhao, H. *et al.* (2022) Development of *RAG2* $^{-/-}$ *IL2Rγ* $^{-/Y}$ immune deficient FAH-knockout miniature pig. Front Immunol. 13: 950194. 12. Haach, V. *et al.* (2023) A polyvalent virosomal influenza vaccine induces broad cellular and humoral immunity in pigs. Virol J. 20 (1): 181. 13. Li, J. *et al.* (2024) Single-cell transcriptomic analysis reveals transcriptional and cell subpopulation differences between human and pig immune cells. Genes Genomics. 46 (3): 303-22. 14. Maciag, S. *et al.* (2022) Effects of freezing storage on the stability of maternal cellular and humoral immune components in porcine colostrum. Vet Immunol Immunopathol. 254: 110520.

Further Reading	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54.
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. This product is photosensitive and should be protected from light.
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/MCA1751F 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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