

Datasheet: MCA6049A647

Description:	MOUSE ANTI PIG CD45RC:Alexa Fluor® 647
Specificity:	CD45RC
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	3a56
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 - 1/10

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 Alexa Fluor 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Specificity

Mouse anti Pig CD45RC, clone 3a56 recognizes a restricted CD45 epitope encoded by the CD45 C exon and will detect the ~210 kDa RC isoform.

CD45 in pigs has three cell surface expressed isoforms: CD45R, CD45RA, and CD45RC ([Schnitzlein and Zuckermann 1998](#)). CD45RC is mainly expressed by CD4+ T cells and weakly by B cells ([Piriou-Guzylack and Salmon 2008](#)). However, during the immune response expression of CD45RC was found to decrease in activated T-helper cells ([Saalmuller et al. 2002](#)). In contrast,

increased expression of CD45RC was observed during the maturation of CD4- gamma delta thymocytes ([Sinkora et al. 2005](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul

Further Reading

1. Zuckermann, F.A. *et al.* (2001) Characterization of monoclonal antibodies assigned to the CD45 subgroup of the Third International Swine CD Workshop. [Vet Immunol Immunopathol. 80 \(1-2\): 165-74.](#)
2. Piriou-Guzylack, L. & Salmon, H. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39 \(6\): 54.](#)
3. Schnitzlein, W.M. & Zuckermann, F.A. (1998) Determination of the specificity of CD45 and CD45R monoclonal antibodies through the use of transfected hamster cells producing individual porcine CD45 isoforms. [Vet Immunol Immunopathol. 60 \(3-4\): 389-401.](#)
4. Saalmüller, A. *et al.* (2002) T-helper cells from naive to committed. [Vet Immunol Immunopathol. 87 \(3-4\): 137-45.](#)
5. Sinkora, M. *et al.* (2005) Development of gammadelta thymocyte subsets during prenatal and postnatal ontogeny. [Immunology. 115 \(4\): 544-55.](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. This product is photosensitive and should be protected from light.
Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

[MOUSE ANTI PIG CD3:FITC \(MCA5951F\)](#)

[MOUSE ANTI PIG CD8 BETA CHAIN:RPE \(MCA5954PE\)](#)

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Printed on 11 Aug 2020

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