

Datasheet: MCA2598A488

Description:	MOUSE ANTI PIG CD117:Alexa Fluor® 488
Specificity:	CD117
Other names:	C-KIT
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	2B8/BM
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

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® 488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519
Preparation	Purified IgG prepared by affinity chromatography on Protein G 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 0.05mg/ml		

Immunogen	Porcine bone marrow cells (BMC).
External Database Links	<p>UniProt: Q2HWD6 Related reagents</p> <p>Entrez Gene: 396810 KIT Related reagents</p>
RRID	AB_1125233
Fusion Partners	Spleen cells from immunized Balb/c mouse were fused with cells of the Sp2/0 myeloma cell line.
Specificity	<p>Mouse anti Pig CD117, clone 2B8/BM is specific for porcine CD117, also known as c-kit, a 155 kDa type I transmembrane protein with protein tyrosine kinase activity, which plays an important role in early hematopoiesis (Perez et al. 2007).</p> <p>Hematopoietic stem cells (HSC) of bone marrow have multilineage differentiation potential and an extensive capacity for self-renewal. The majority of adult bone marrow hematopoietic progenitor cells are CD117+ and have been used successfully in xenograft transplantation models for long term survival of grafts, without symptoms of graft-versus-host disease (GVHD).</p> <p>Mouse anti pig CD117, clone 2B8/BM recognizes CD117 on a small subset of porcine bone marrow progenitor cells and therefore provides an alternative tool from the previously used c-kit ligand stem cell factor, for the isolation and enrichment of porcine stem cells.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.
References	<ol style="list-style-type: none"> 1. Pérez C <i>et al.</i> (2007) Characterisation of porcine bone marrow progenitor cells identified by the anti-c-kit (CD117) monoclonal antibody 2B8/BM. J Immunol Methods. 321 (1-2): 70-9. 2. Hatzistergos, K.E. <i>et al.</i> (2010) Bone marrow mesenchymal stem cells stimulate cardiac stem cell proliferation and differentiation. Circ Res. 107: 913-22. 3. Escalona, Z. <i>et al.</i> (2014) Molecular characterization and expression of porcine Siglec-5. Dev Comp Immunol. 44 (1): 206-16. 4. Wehman, B. <i>et al.</i> (2016) Mesenchymal Stem Cells Preserve Neonatal Right Ventricular Function In A Porcine Model Of Pressure Overload. Am J Physiol Heart Circ Physiol. Apr 22:ajpheart.00955.2015. [Epub ahead of print] 5. Wehman, B. <i>et al.</i> (2016) Intracoronary Stem Cell Delivery to the Right Ventricle: A Preclinical Study. Semin Thorac Cardiovasc Surg. 28 (4): 817-24.
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

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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® 488 \(MCA928A488\)](#)

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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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