

## Datasheet: NB-47-03733-100UG

<b>Description:</b>	MOUSE ANTI PIG MACROPHAGES
<b>Specificity:</b>	MACROPHAGES
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	BA4D5
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)				1/50 - 1/100
Immunohistology - Frozen	#			
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation		■		
Western Blotting (2)		■		
Immunofluorescence		■		

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

**(1) Membrane permeabilization is required for this application.**

**(2) BA4D5 recognizes a 105kDa antigen in pig macrophage lysates under non-reducing conditions.**

<b>Target Species</b>	Pig
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

<b>Immunogen</b>	Porcine alveolar macrophages.
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Pig Macrophages antibody, clone BA4D5</b> recognizes porcine cells of the monocyte/macrophage lineage. Expression of the antigen is increased with maturation, with higher expression on peritoneal and alveolar macrophages.</p> <p>Some expression has also been observed on peripheral blood lymphocytes.</p> <p>The antigen recognized by clone BA4D5 has a broad tissue distribution and this antibody stains macrophages in a range of tissues, including the thymus, spleen periarteriolar lymphoid sheath (PALS), spleen red pulp and the Peyer's patches. Expression has also been reported on some non-hematopoietic cells including endothelial cells.</p> <p>It is believed that clone BA4D5 may be specific for porcine CD68 (<a href="#">Poulsen et al. 2016</a>) although the protein recognized by this antibody has not yet been fully characterized. The protein is expressed on the cell surface, although it is most abundantly expressed in the cytoplasm.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Luechtenborg, B. <i>et al.</i> (2008) Function of scavenger receptor class A type I/II is not important for smooth muscle foam cell formation. <a href="#">Eur J Cell Biol. 87: 91-9.</a></li> <li>Fujita M <i>et al.</i> (2013) Technique of endoscopic biopsy of islet allografts transplanted into the gastric submucosal space in pigs. <a href="#">Cell Transplant. 22 (12): 2335-44.</a></li> <li>Muscari C <i>et al.</i> (2010) Comparison between Culture Conditions Improving Growth and Differentiation of Blood and Bone Marrow Cells Committed to the Endothelial Cell Lineage. <a href="#">Biol. Proced Online. 12 (1): 9023.</a></li> <li>Liu, G. <i>et al.</i> (2015) Influenza A Virus Panhandle Structure is Directly Involved in RIG-I Activation and IFN Induction. <a href="#">J Virol. pii: JVI.00232-15.</a></li> <li>Ezquerro, A. <i>et al.</i> (2009) Porcine myelomonocytic markers and cell populations. <a href="#">Dev Comp Immunol. 33 (3): 284-98.</a></li> <li>Rayat, G.R. <i>et al.</i> (2016) First update of the International Xenotransplantation Association consensus statement on conditions for undertaking clinical trials of porcine islet products in type 1 diabetes - Chapter 3: Porcine islet product manufacturing and release testing criteria. <a href="#">Xenotransplantation. 23 (1): 38-45.</a></li> <li>Poulsen, C.B. <i>et al.</i> (2016) Treatment with a human recombinant monoclonal IgG antibody against oxidized LDL in atherosclerosis-prone pigs reduces cathepsin S in coronary lesions. <a href="#">Int J Cardiol. 215: 506-515.</a></li> <li>Sohn, E.H. <i>et al.</i> (2015) Allogenic iPSC-derived RPE cell transplants induce immune response in pigs: a pilot study. <a href="#">Sci Rep. 5: 11791.</a></li> <li>Wang, L. <i>et al.</i> (2017) Porcine alveolar macrophage polarization is involved in inhibition of porcine reproductive and respiratory syndrome virus (PRRSV) replication. <a href="#">J Vet Med Sci. Sep 17 [Epub ahead of print].</a></li> <li>Porras, A.M. <i>et al.</i> (2018) Creation of disease-inspired biomaterial environments to mimic pathological events in early calcific aortic valve disease. <a href="#">Proc Natl Acad Sci U S A. 115 (3): E363-E371.</a></li> </ol>
<b>Further Reading</b>	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a>

**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. 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 dispatch

---

**Regulatory** For research purposes only

---