

# Datasheet: MCA2681 BATCH NUMBER 164083

Description:	RAT ANTI MOUSE ABCA1	
Specificity:	ABCA1	
Format:	Purified	
<b>Product Type:</b>	Monoclonal Antibody	
Clone:	5A1-1422	
Isotype:	lgG2a	
Quantity:	0.25 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	<b>Not Determined</b>	Suggested Dilution
Flow Cytometry	•			1/10 - 1/200
Immunohistology - Frozen			•	
Immunohistology - Paraffin			•	
ELISA			•	
Immunoprecipitation			•	
Western Blotting		•		
Immunofluorescence				

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	Mouse	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein C supernatant	3 from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )	

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	ABCA1 transfected HeLa cells.
External Database Links	UniProt: P41233 Related reagents  Entrez Gene:
	11303 Abca1 Related reagents
Synonyms	Abc1
RRID	AB_1604583
Specificity	Rat anti Mouse ABCA1 antibody, clone 5A1.1422 recognizes murine adenosine triphosphate (ATP) Binding cassette transporter 1 (ABCA1). The ABC transporters are a large family of conserved proteins that transport a wide variety of molecules across cellular membranes. ABCA1 is a member of the ABC-A sub-family, which acts as a lipid translocator. The molecule was originally identified as a scavenger receptor on macrophages and research shows that ABCA1 also plays a major role in cholesterol metabolism. ABCA1 may play an important role in protecting against cardiovascular disease.
	Mutations in ABCA1 gene have been associated with <u>Tangier disease</u> , a genetic disorder of lipid metabolism, and the more common <u>Familial HDL deficiency</u> , peresenting with many of the same symproms.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Pradel, L.C. <i>et al.</i> (2009) ATP-binding cassette transporter hallmarks tissue macrophages and modulates cytokine-triggered polarization programs. <u>Eur J Immunol. 39</u> (8): 2270-80.</li> <li>Wang, Y. <i>et al.</i> (2019) Smooth Muscle Cells Contribute the Majority of Foam Cells in ApoE (Apolipoprotein E)-Deficient Mouse Atherosclerosis. <u>Arterioscler Thromb Vasc Biol.</u> 39 (5): 876-87.</li> </ol>
Further Reading	1. Zarubica, A. <i>et al.</i> (2007) ABCA1, from pathology to membrane function. <u>Pflugers Arch.</u> 453 (5): 569-79.
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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2681">https://www.bio-rad-antibodies.com/SDS/MCA2681</a> 10040
Regulatory	For research purposes only

# **Related Products**

## **Recommended Secondary Antibodies**

Rabbit Anti Rat IgG (STAR16...) DyLight®800

Rabbit Anti Rat IgG (STAR17...)

Goat Anti Rat IgG (STAR72...)

Goat Anti Rat IgG (STAR69...)

Goat Anti Rat IgG (STAR69...)

Rabbit Anti Rat IgG (STAR73...)

RPE

HRP

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) <u>DyLight®550</u>, <u>DyLight®650</u>, <u>DyLight®800</u>

Goat Anti Rat IgG (STAR131...) Alk. Phos., Biotin

# **Recommended Negative Controls**

## RAT IgG2a NEGATIVE CONTROL (MCA1212)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M405488:220916'

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