

## Datasheet: MCA5960GA

### **BATCH NUMBER 154624**

Description:	MOUSE ANTI HUMAN SPHINGOSINE 1- PHOSPHATE RECEPTOR 1
Specificity:	SPHINGOSINE 1- PHOSPHATE RECEPTOR 1
Other names:	CD363, S1P1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2B9
Isotype:	lgG2a
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			1/10
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation	-			1/300
Western Blotting	•			1/5000
Immunofluorescence	•			1/500

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

Approx.	Protein
Concent	rations

IgG concentration 1.0 mg/ml

### External Database Links

**UniProt:** 

P21453 Related reagents

**Entrez Gene:** 

1901 S1PR1 Related reagents

**Synonyms** 

CHEDG1, EDG1

#### Specificity

Mouse anti Human Sphingosine 1-Phosphate Receptor 1, clone 2B9 recognizes S1P1, otherwise known as CD363/EDG-1, a bioactive lysophospholipid and inducible member of the G-protein coupled receptor superfamily (GPCR) which plays an important role in a variety of cellular processes.

During inflammatory diseases such as atherosclerosis the phenotype switching of activated macrophages is influenced by the presence of particular cytokines within the microenvironment. These cells have been characterized as classically activated M1 macrophages, in response to pro-inflammatory molecules such as interferon gamma and lipopolysaccharide, or as alternatively activated M2 macrophages, in response to anti-inflammatory cytokines such as interleukin-4. Activation of S1P1 through its ligand S1P (Sphingosine 1-Phosphate) has been identified as an important promoter of anti-inflammatory M2 macrophages (Hughes et al. 2008).

Apoptotic cells can also influence the pro-versus anti-inflammatory macrophage response, and S1P acts as a positive regulator for anti-apoptotic/pro-survival responses by binding to S1P1. Growing evidence suggests that the expression of S1P1 on macrophages may convey protection against apoptosis, at least in part, having implications for the pathogenesis of inflammatory diseases and cancer.

Deviation in sphingosine 1-phosphate (S1P) signaling is important in many types of cancer. Analysis of S1P1 and SK1 receptors during the development of tamoxifen resistance in Estrogen Receptor (ER) breast cancer patients concurs that the expression levels of S1P1 correlates with tumor size and Progesterone Receptor (PR) status and that high S1P1 membrane expression is associated with shorter time to recurrence.

## Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10<sup>6</sup> cells in 100ul

#### 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 despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:

https://www.bio-rad-antibodies.com/SDS/MCA5960GA

10040

Regulatory

For research purposes only

# **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (STAR70...) FITC

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

## **Recommended Negative Controls**

#### MOUSE IgG2a NEGATIVE CONTROL (MCA929)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21

Email: antibody\_sales\_uk@bio-rad.com

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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