

Datasheet: MCA1539

Description: MOUSE ANTI HUMAN CD9		
Specificity:	CD95	
Other names:	FAS, TNFRSF6	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone: LOB 3/17		
Isotype:	lgG1	
Quantity:	0.2 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	-			1/50 - 1/100
Immunohistology - Frozen		•		
Immunohistology - Paraffin		•		
ELISA			•	
Immunoprecipitation				20ug/ml
Western Blotting				

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
Species Cross Reactivity	Reacts with: Rhesus Monkey  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	TRIS buffered saline			
Preservative Stabilisers	<0.1% sodium azide (NaN <sub>3</sub> )			
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml			
Immunogen	Fusion protein comprising extracellular domain of human Fas linked to human Fc.			
External Database Links	UniProt: P25445 Related reagents  Entrez Gene: 355 FAS Related reagents			
Synonyms	APT1, FAS1, TNFRSF6			
RRID	AB_321975			
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NSI myeloma cell line.			
Specificity	<b>Mouse anti Human CD95 antibody, clone LOB 3/17</b> recognizes the human CD95 cell surface antigen, also known as Tumor necrosis factor receptor superfamily member 6, Fas, Apo-1 antigen, Apoptosis-mediating surface antigen FAS or FASLG receptor. CD95 is a 310 amino acid ~40-50 kDa single pass type I transmembrane glycoprotein expressed by activated T and B cells, NK cells and thymocytes. Mutations in the CD95 gene, FAS can lead to the development of Autoimmune lymphoproliferative syndrome 1A (ALPS1A), an apoptotic disorder with early onset resulting in an accumulation of autoreactive lymphocytes (Peters <i>et al.</i> 1999).			
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl			
References	<ol> <li>Mesdaghi, M. <i>et al.</i> (2010) Natural killer cells in allergic rhinitis patients and nonatopic controls. Int Arch Allergy Immunol. 153 (3): 234-8.</li> <li>Ximeri, M. <i>et al.</i> (2010) Effect of lenalidomide therapy on hematopoiesis of patients with myelodysplastic syndrome associated with chromosome 5q deletion. Haematologica. 95 (3): 406-14.</li> <li>Aref, S. <i>et al.</i> (2004) Accelerated neutrophil apoptosis in neutropenic patients with hepatosplenic schistosomiasis is induced by serum Fas ligand. Hematol J. 5 (5): 434-9.</li> <li>Welsh, J.P. <i>et al.</i> (2004) In vitro effects of interferon-gamma and tumor necrosis factor-alpha on CD34+ bone marrow progenitor cells from aplastic anemia patients and normal donors. Hematol J. 5 (1): 39-46.</li> <li>Wethkamp, N. <i>et al.</i> (2011) Daxx-beta and Daxx-gamma, two novel splice variants of the transcriptional co-repressor Daxx. J Biol Chem. 286 (22): 19576-88.</li> <li>Chen, J.Y. <i>et al.</i> (2003) TNF-alpha renders human peritoneal mesothelial cells sensitive</li> </ol>			

to anti-Fas antibody-induced apoptosis. Nephrol Dial Transplant. 18 (9): 1741-7.

- 7. Papadaki, H.A. *et al.* (2002) Bone marrow progenitor cell reserve and function and stromal cell function are defective in rheumatoid arthritis: evidence for a tumor necrosis factor alpha-mediated effect. Blood. 99 (5): 1610-9.
- 8. Mavroudi, I. *et al.* (2011) The CD40/CD40 ligand interactions exert pleiotropic effects on bone marrow granulopoiesis. <u>J Leukoc Biol. 89 (5): 771-83.</u>
- 9. Pyrovolaki, K. *et al.* (2009) Increased expression of CD40 on bone marrow CD34+ hematopoietic progenitor cells in patients with systemic lupus erythematosus: contribution to Fas-mediated apoptosis. Arthritis Rheum. 60 (2): 543-52.
- 10. Boula, A. *et al.* (2006) Effect of cA2 anti-tumor necrosis factor-alpha antibody therapy on hematopoiesis of patients with myelodysplastic syndromes. <u>Clin Cancer Res. 12 (10):</u> 3099-108.
- 11. Papadaki, H.A. *et al.* (2005) Normal bone marrow hematopoietic stem cell reserves and normal stromal cell function support the use of autologous stem cell transplantation in patients with multiple sclerosis. <u>Bone Marrow Transplant. 36 (12): 1053-63.</u>
- 12. Bachsais, M. *et al.* (2016) The Interaction of CD154 with the  $\alpha$ 5 $\beta$ 1 Integrin Inhibits Fas-Induced T Cell Death. PLoS One. 11 (7): e0158987.
- 13. Ismail, M. *et al.* (2001) Bcl-2 and Bcl-x expression in the CD34+ cells of aplastic anaemia patients: relationship with increased apoptosis and upregulation of Fas antigen. Br J Haematol. 113 (3): 706-12.
- 14. Bachsais, M. *et al.* (2020) CD154 inhibits death of T cells via a Cis interaction with the α5β1 integrin. PLoS One. 15 (8): e0235753.
- 15. Ismail, M.M. *et al.* (2003) Differential apoptosis and Fas expression on GPI-negative and GPI-positive stem cells: a mechanism for the evolution of paroxysmal nocturnal haemoglobinuria. Br J Haematol. 123 (3): 545-51.

### **Further Reading**

1. Paulsen, M. & Janssen, O. (2011) Pro- and anti-apoptotic CD95 signaling in T cells. Cell Commun Signal. 9: 7.

### 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 #10057 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1539">https://www.bio-rad-antibodies.com/SDS/MCA1539</a> 10057
Regulatory	For research purposes only

# **Related Products**

### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP

Rabbit Anti Mouse IgG (STAR12...)

RPE
Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...) RPE

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

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

FITC, HRP

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

Rabbit Anti Mouse IgG (STAR13...) HRP
Rabbit Anti Mouse IgG (STAR9...) FITC

# **Recommended Negative Controls**

## MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 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 'M410566:221028'

### Printed on 29 Aug 2024

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