

# Datasheet: MCA1521F BATCH NUMBER 158679

Description:	HAMSTER ANTI MOUSE CD154:FITC		
Specificity:	CD154		
Other names:	CD40 LIGAND		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Clone:	39H5		
Isotype:	IgG		
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	•			Neat

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Farget Species	Mouse		
Product Form	Purified IgG conjuga	ted to Fluorescein Isoth	niocyanate Isomer 1
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	FITC	490	525
eparation	Purified IgG prepared supernatant	d by affinity chromatogi	raphy on Protein G
er Solution	Phosphate buffered	saline	
servative	0.09% Sodium Azide	•	
bilisers			
III3613	1% Bovine Serum	n Albumin	

## Concentrations

Immunogen	L cells transfected with CD40L.
External Database	UniProt:
	P27548 Related reagents
	Entrez Gene:  21947 Cd40lg Related reagents
Synonyms	Cd40I, Tnfsf5
RRID	AB_321591
Specificity	Hamster anti Mouse CD154 antibody, clone 39H5 recognizes the murine CD40 ligand, also known as CD40L or CD154. CD154 is a ~39 kDa cell surface glycoprotein . CD154 is expressed by activated CD4+ve T lymphocytes.
	Hamster anti Mouse CD154 antibody, clone 39H5 is routinely tested in flow cytometry on mouse CD40L transfected L cells.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
	The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR ( <u>BUF041A/B</u> ).
References	<ol> <li>Hogg, K.G. <i>et al.</i> (2003) IL-10 regulates early IL-12-mediated immune responses induced by the radiation-attenuated schistosome vaccine. <u>Int Immunol. 15 (12): 1451-9.</u></li> <li>McGregor, C.M. <i>et al.</i> (2004) CD154 is a negative regulator of autoaggressive CD8+ T cells in type 1 diabetes. <u>Proc Natl Acad Sci U S A. 101 (25): 9345-50.</u></li> <li>Dong, L. <i>et al.</i> (2003) An immunostimulatory oligodeoxynucleotide containing a cytidine-guanosine motif protects senescence-accelerated mice from lethal influenza virus by augmenting the T helper type 1 response <u>J Gen Virol. 84: 1623-8.</u></li> </ol>
	4. Neron. S, <i>et al.</i> (2005) Differential responses of human B-lymphocyte subpopulations to graded levels of CD40-CD154 interaction. <u>Immunology. 2005 Dec;116(4):454-63.</u>
	5. Roy, A. <i>et al.</i> (2001) Increased efficiency of gamma-irradiated versus mitomycin C-treated feeder cells for the expansion of normal human cells in long-term cultures <u>J Hematother Stem Cell Res. 2001 Dec;10(6): 873-80.</u>
	6. Mazar, J. et al. (2005) CD40 ligand (CD154) takes part in regulation of the transition to
	mononuclear cell dominance during peritonitis. <u>Kidney Int. 67: 1340-9.</u> 7. Hacker, U.T. <i>et al.</i> (2006) Gene transfer preferentially selects MHC class I positive
	tumour cells and enhances tumour immunogenicity. <u>Cancer Immunol Immunother. 55 (5):</u> 547-57.
	8. Mazar, J. et al. (2005) CD40 ligand (CD154) takes part in regulation of the transition to
	mononuclear cell dominance during peritonitis. <u>Kidney Int. 67 (4): 1340-9.</u>
	9. Serba, S. et al. (2008) Transfection with CD40L induces tumour suppression by

dendritic cell activation in an orthotopic mouse model of pancreatic adenocarcinoma. Gut.

#### 57 (3): 344-51.

10. Crother, T.R. *et al.* (2012) Plasmacytoid dendritic cells play a role for effective innate immune responses during *Chlamydia pneumoniae* infection in mice. <u>PLoS One. 7 (10):</u> e48655.

#### 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
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1521F">https://www.bio-rad-antibodies.com/SDS/MCA1521F</a> 10041
Regulatory	For research purposes only

## Related Products

### **Recommended Negative Controls**

HAMSTER (ARMENIAN) IgG NEGATIVE CONTROL:FITC (MCA2356F)

## **Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

North & South Tel: +1 800 265 7376

America

Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Fax: +1 919 8/8 3/51

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

Fax: +44 (0)1865 852 739

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

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 'M384744:210513'

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