Datasheet: MCA1521F

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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen	L cells transfected with CD40L.
External Database Links	**UniProt:** P27548 Related reagents **Entrez Gene:** 21947 Cd40lg Related reagents
Synonyms	Cd40l, 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 10µl of the suggested working dilution to label 10^6 cells in 100µl. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).
References	1. Roy, A. *et al.* (2001) Increased efficiency of gamma-irradiated versus mitomycin C-treated feeder cells for the expansion of normal human cells in long-term cultures J Hematother Stem Cell Res. 2001 Dec;10(6): 873-80. 2. Dong, L. *et al.* (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 J Gen Virol. 84: 1623-8. 3. Hogg, K.G. *et al.* (2003) IL-10 regulates early IL-12-mediated immune responses induced by the radiation-attenuated schistosome vaccine. Int Immunol. 15 (12): 1451-9. 4. McGregor, C.M. *et al.* (2004) CD154 is a negative regulator of autoaggressive CD8+ T cells in type 1 diabetes. Proc Natl Acad Sci U S A. 101 (25): 9345-50. 5. Mazar, J. *et al.* (2005) CD40 ligand (CD154) takes part in regulation of the transition to mononuclear cell dominance during peritonitis. Kidney Int. 67 (4): 1340-9. 6. Neron. S, *et al.* (2005) Differential responses of human B-lymphocyte subpopulations to graded levels of CD40-CD154 interaction. Immunology. 2005 Dec;116(4):454-63. 7. Hacker, U.T. *et al.* (2006) Gene transfer preferentially selects MHC class I positive tumour cells and enhances tumour immunogenicity. Cancer Immunol Immunother. 55 (5): 547-57. 8. 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. 9. Crother, T.R. *et al.* (2012) Plasmacytoid dendritic cells play a role for effective innate immune responses during *Chlamydia pneumoniae* infection in mice. PLoS One. 7 (10): 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: https://www.bio-rad-antibodies.com/SDS/MCA1521F 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 America
Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide
Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe
Tel: +49 (0) 89 8090 95 21
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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