

## Datasheet: MCA2755

<b>Description:</b>	MOUSE ANTI HUMAN CD154 (SOLUBLE)
<b>Specificity:</b>	CD154 (SOLUBLE)
<b>Other names:</b>	CD40 LIGAND, TRAP
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1H4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			
Functional Assays			▪	

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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Recombinant human soluble CD154 conjugated to BSA.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P29965</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">959</a> CD40LG    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD40L, TNFSF5, TRAP
<b>RRID</b>	AB_1055608
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the myeloma Sp2/0 cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD154 (Soluble) antibody, clone 1H4</b> recognizes the soluble form of CD154, otherwise known as CD40 Ligand/TRAP, a ~32 kDa glycoprotein and member of the TNF family, which is specifically expressed on activated, but not resting, CD4+ T cells, dendritic cells (DCs), B cells and macrophages.</p> <p>CD154 binds CD40, and acts as a key co-stimulatory molecule through the activation of antigen-presenting cells, and as a regulator of the generation and functional properties of Th1 helper cells. CD154 exists in both a membrane-bound and soluble form, the latter of which is generated through proteolytic processing by a matrix metalloproteinase (MMP), in activated cells.</p> <p>The binding of CD154 with its receptor CD40 is vital for many biological processes, including Ig class switching, germinal centre formation and the survival of CD40+ B cells, B cell proliferation in the absence of co-stimulus, the production of IgE in the presence of interleukin-4 (IL-4), and also in the production of pro-inflammatory cytokines, MMPs, prostaglandins and adhesion molecule upregulation, in non-immune cells.</p> <p>Mouse anti Human CD154 (Soluble) antibody, clone 1H4 recognizes the soluble form of the protein.</p>
<b>References</b>	1. Pietravalle, F. <i>et al.</i> (1996) Human native soluble CD40L is a biologically active trimer, processed inside microsomes. <a href="#">J Biol Chem. 271 (11): 5965-7.</a>
<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2755">https://www.bio-rad-antibodies.com/SDS/MCA2755</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M389479:210806'

Printed on 12 Aug 2023