

Datasheet: MCA1561

**BATCH NUMBER 160812**

<b>Description:</b>	MOUSE ANTI HUMAN CD154 (CD40L)
<b>Specificity:</b>	CD154
<b>Other names:</b>	CD40 LIGAND
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TRAP-1
<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	▪			1/10 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody 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 ascites
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	0.1% Bovine Serum Albumin
<b>Approx. Protein</b>	IgG concentration 1.0 mg/ml

## Concentrations

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**Immunogen** Mouse myeloma cell line transfected with human CD40L (CD154)

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## External Database Links

**UniProt:**

[P29965](#)    [Related reagents](#)

**Entrez Gene:**

[959](#)    CD40LG    [Related reagents](#)

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**Synonyms** CD40L, TNFSF5, TRAP

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**RRID** AB\_321588

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**Fusion Partners** Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3X63.Ag 8653 myeloma cell line.

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**Specificity** **Mouse anti Human CD154 antibody, clone TRAP-1** recognises the human CD40 ligand, also known as CD154, TNF-related activation protein (TRAP) or T-cell antigen Gp39. CD154 is a 261 amino acid ~32 kDa single pass, type-1 transmembrane glycoprotein ([UniProt: P29965](#)). CD154 is expressed on activated T lymphocytes, predominantly CD4 +ve and also on some basophils and mast cells.

Mouse anti Human CD154 antibody, clone TRAP-1 binds to CD154 at an epitope distinct from the CD40 binding site ([Kroczeck et al. 1994](#)).

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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## References

1. Hermann, P. *et al.* (1993) Expression of a 32-kDa ligand for the CD40 antigen on activated human T lymphocytes. [Eur J Immunol. 23 \(4\): 961-4.](#)
  2. Lane, P. *et al.* (1992) Activated human T cells express a ligand for the human B cell-associated antigen CD40 which participates in T cell-dependent activation of B lymphocytes. [Eur J Immunol. 22 \(10\): 2573-8.](#)
  3. Kroczeck, R.A. *et al.* (1994) Defective expression of CD40 ligand on T cells causes "X-linked immunodeficiency with hyper-IgM (HIGM1)". [Immunol Rev. 138: 39-59.](#)
  4. Houtkamp, M.A. *et al.* (2001) Interleukin-15 expression in atherosclerotic plaques: an alternative pathway for T-cell activation in atherosclerosis? [Arterioscler Thromb Vasc Biol. 21: 1208-13.](#)
  5. Yarwood, H. *et al.* (2000) Resting and activated T cells induce expression of E-selectin and VCAM-1 by vascular endothelial cells through a contact-dependent but CD40 ligand-independent mechanism. [J Leukoc Biol. 68: 233-42.](#)
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## 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.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1561">https://www.bio-rad-antibodies.com/SDS/MCA1561</a> 10041
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<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>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</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>
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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)

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