

Datasheet: MCA2755

BATCH NUMBER 170525

Description:	MOUSE ANTI HUMAN CD154 (SOLUBLE)
Specificity:	CD154 (SOLUBLE)
Other names:	CD40 LIGAND, TRAP
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1H4
Isotype:	IgG1
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 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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations

IgG concentration 1.0mg/ml

Immunogen

Recombinant human soluble CD154 conjugated to BSA.

External Database Links

UniProt:

[P29965](#)

[Related reagents](#)

Entrez Gene:

[959](#)

CD40LG

[Related reagents](#)

Synonyms

CD40L, TNFSF5, TRAP

RRID

AB_1055608

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with cells of the myeloma Sp2/0 cell line.

Specificity

Mouse anti Human CD154 (Soluble) antibody, clone 1H4 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.

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.

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.

Mouse anti Human CD154 (Soluble) antibody, clone 1H4 recognizes the soluble form of the protein.

References

1. Pietravalle, F. *et al.* (1996) Human native soluble CD40L is a biologically active trimer, processed inside microsomes. [J Biol Chem. 271 \(11\): 5965-7.](#)

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

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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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Printed on 18 Jan 2024