

Datasheet: MCA6051PE

Description:	HAMSTER ANTI MOUSE CD278:RPE
Specificity:	CD278
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	C398.4A
Isotype:	IgG
Quantity:	100 TESTS/0.5ml

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	▪			1/2 - 1/10

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

Species Cross Reactivity

Reacts with: Rat, Human

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578

Preparation

Purified IgG prepared by affinity chromatography

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN₃)

Immunogen	Mouse T cell clone D10.G4.1
External Database Links	<p>UniProt: Q9WVS0 Related reagents</p> <p>Entrez Gene: 54167 Icos Related reagents</p>
Synonyms	Ailim
Specificity	<p>Hamster anti Mouse CD278, clone C398.4A recognizes CD278 also known as ICOS (inducible T cell co-stimulatory molecule) or H4. CD278 is a member of the CD28 family (Hutloff <i>et al.</i> 1999) which also contains the immune attenuator CTLA-4. CD278 expression is found following T cell activation (Yoshinaga <i>et al.</i> 1999) and is able to co-stimulate T cell proliferative responses. ICOS binds to ICOS ligand which is expressed on antigen presenting cells. This ICOS/ICOSL interaction activates PI3K/AKT, MAPK and NKFB signalling pathways in a manner distinct from that activated via CD28. In a larger focus ICOS signaling plays a role in several physiological processes such as T follicular helper cell induction and maturation, antibody affinity maturation and regulation of T helper cell inflammatory responses.</p>
Flow Cytometry	Use 10 µl of the suggested working dilution to label 1x10 ⁶ cells in 100ul
Further Reading	<ol style="list-style-type: none"> Hutloff, A. <i>et al.</i> (1999) ICOS is an inducible T-cell co-stimulator structurally and functionally related to CD28. Nature. 397 (6716): 263-6. Yoshinaga SK <i>et al.</i> (1999) T-cell co-stimulation through B7RP-1 and ICOS. Nature. 402 (6763): 827-32.
Storage	<p>Store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
Health And Safety Information	<p>Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA6051PE 10040</p>
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[HAMSTER \(ARMENIAN\) IgG NEGATIVE CONTROL:RPE \(MCA2356PE\)](#)

North & South Tel: +1 800 265 7376

Worldwide Tel: +44 (0)1865 852 700

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

America Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

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

'M401841:220718'

Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)