

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.						
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
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 (NaN ₃)						
Immunogen	Mouse T cell clone D10.G4.1						
External Database Links	UniProt: Q9WVS0 Related reagents Entrez Gene:						

Synonyms	Ailim
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Specificity	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.
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Flow Cytometry	Use 10 µl of the suggested working dilution to label 1x10 ⁶ cells in 100ul
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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.
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Storage	Store at +4°C. DO NOT FREEZE. 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.
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Shelf Life	18 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation available at: Material Safety Datasheet documentation #10040 available at https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

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
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'M303388:170216'

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