

# Datasheet: MCA4645PE

Description:	MOUSE ANTI HUMAN CD319:RPE
Specificity:	CD319
Other names:	CRACC
Format:	RPE
<b>Product Type:</b>	Monoclonal Antibody
Clone:	162
Isotype:	lgG2b
Quantity:	100 TESTS

## **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				Neat

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 conjugate	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized				
Reconstitution	Reconstitute with 1ml	distilled water				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)			
	RPE 488nm laser	496	578			
Preparation	Purified IgG prepared by affinity chromatography on Protein G supernatant					
Buffer Solution	Phosphate buffered sa	aline				
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Alb 5% Sucrose	`				

Immunogen	CD319 - HulgG fusion protein.			
External Database Links	UniProt:  Q9NQ25 Related reagents			
	Entrez Gene: <u>57823</u> SLAMF7 Related reagents			
Synonyms	CS1			
RRID	AB_2188099			
Specificity	Mouse anti Human CD319 antibody, clone 162 recognizes human CD319, otherwise known as CRACC (CD2-like receptor-activating cytotoxic cells), a type I transmembrane protein and member of the CD2 receptor family, expressed by natural killer (NK) cells, cytotoxic lymphocytes and activated B cells.			
	Unlike the CD2 family receptors 2B4 and NTB-A, which trigger NK cell-mediated cytotoxicity through the recruitment of the adaptor protein SAP (SLAM-associated protein CD319 has been shown to activate cytotoxicity through a unique SAP-independent ERK-mediated signalling pathway, through association with, and subsequent phosphorylation by, the adaptor protein EAT-2.			
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.			
References	1. Bouchon, A. <i>et al.</i> (2001) Activation of NK cell-mediated cytotoxicity by a SAP-independent receptor of the CD2 family. <u>J Immunol. 167 (10): 5517-21.</u> 2. Tassi, I. & Colonna, M. (2005) The cytotoxicity receptor CRACC (CS-1) recruits EAT-2 and activates the PI3K and phospholipase Cgamma signaling pathways in human NK cells. <u>J Immunol. 175 (12): 7996-8002.</u> 3. Kawano, Y. <i>et al.</i> (2013) Hypoxia reduces CD138 expression and induces an immature and stem cell-like transcriptional program in myeloma cells. <u>Int J Oncol. 43 (6): 1809-16.</u> 4. Pojero, F. <i>et al.</i> (2016) Utility of CD54, CD229, and CD319 for the identification of plasma cells in patients with clonal plasma cell diseases. <u>Cytometry B Clin Cytom. 90 (1): 91-100.</u>			

### Storage

Prior to reconstitution store at +4°C.

After reconstitution 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.

### Guarantee

12 months from date of despatch

# Health And Safety Information

Material Safety Datasheet documentation #20487 available at: 20487: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf</a>

# **Related Products**

### **Recommended Negative Controls**

MOUSE IgG2b NEGATIVE CONTROL:RPE (MCA691PE)

Email: antibody\_sales\_us@bio-rad.com

### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Fax: +44 (0)1865 852 739

Email: antibody\_sales\_de@bio-rad.com

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