

## Datasheet: MCA4645FT

<b>Description:</b>	MOUSE ANTI HUMAN CD319:FITC
<b>Specificity:</b>	CD319
<b>Other names:</b>	CRACC
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	162
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	25 µg

## 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	■			

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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1mg/ml		

Immunogen	CD319 - HulgG fusion protein.
External Database Links	<p><b>UniProt:</b>  <a href="#">Q9NQ25</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">57823</a>    SLAMF7    <a href="#">Related reagents</a></p>
Synonyms	CS1
RRID	AB_2188100
Specificity	<p><b>Mouse anti Human CD319 antibody, clone 162</b> 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.</p> <p>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.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
References	<ol style="list-style-type: none"> <li>1. Bouchon, A. <i>et al.</i> (2001) Activation of NK cell-mediated cytotoxicity by a SAP-independent receptor of the CD2 family. <a href="#">J Immunol. 167 (10): 5517-21.</a></li> <li>2. Tassi, I. &amp; 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. <a href="#">J Immunol. 175 (12): 7996-8002.</a></li> <li>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. <a href="#">Int J Oncol. 43 (6): 1809-16.</a></li> <li>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. <a href="#">Cytometry B Clin Cytom. 90 (1): 91-100.</a></li> </ol>
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>

## Related Products

### Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:FITC \(MCA691F\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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