

## Datasheet: MCA2330

**BATCH NUMBER 156409**

<b>Description:</b>	MOUSE ANTI HUMAN CD312
<b>Specificity:</b>	CD312
<b>Other names:</b>	EMR2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2A1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/200
Immunohistology - Frozen	▪			1/50 - 1/200
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	NIH-3T3 cells stably transfected with EMR2 (EGF1-5) cDNA.
External Database Links	<p><b>UniProt:</b>  <a href="#">Q9UHX3</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">30817</a>   EMR2   <a href="#">Related reagents</a></p>
RRID	AB_566724
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	<b>Mouse anti Human CD312 antibody, clone 2A1</b> recognizes human EMR2, a member of the epidermal growth factor-seven transmembrane (EGF-TM7) family of proteins, which is closely related to CD97. EMR2, also known as CD312, is predominantly expressed on myeloid dendritic cells, monocytes and tissue macrophages. Various isoforms of EMR2 have been documented. The ligand for the largest isoform of EMR2 has recently been identified as chondroitin sulphate, which binds to the fourth EGF-like module of EMR2. Mouse anti Human CD312 antibody, clone 2A1 recognizes the stalk region of EMR2.
Flow Cytometry	Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul.
References	<ol style="list-style-type: none"> <li>1. Kwakkenbos, M.J. <i>et al.</i> (2002) The human EGF-TM7 family member EMR2 is a heterodimeric receptor expressed on myeloid cells. <a href="#">J Leukoc Biol. 71 (5): 854-62.</a></li> <li>2. Stacey, M. <i>et al.</i> (2003) The epidermal growth factor-like domains of the human EMR2 receptor mediate cell attachment through chondroitin sulfate glycosaminoglycans. <a href="#">Blood. 102 (8): 2916-24.</a></li> <li>3. Yona, S. <i>et al.</i> (2008) Ligation of the adhesion-GPCR EMR2 regulates human neutrophil function. <a href="#">FASEB J. 22 (3): 741-51.</a></li> <li>4. Lin, H.H. <i>et al.</i> (2004) Autocatalytic cleavage of the EMR2 receptor occurs at a conserved G protein-coupled receptor proteolytic site motif. <a href="#">J Biol Chem. 279 (30): 31823-32.</a></li> <li>5. Huang, Y.S. <i>et al.</i> (2018) Membrane-association of EMR2/ADGRE2-NTF is regulated by site-specific N-glycosylation. <a href="#">Sci Rep. 8 (1): 4532.</a></li> <li>6. Shankar-Hari, M. <i>et al.</i> (2018) Early PREdiction of sepsis using leukocyte surface biomarkers: the ExPRES-sepsis cohort study. <a href="#">Intensive Care Med. 44 (11): 1836-48.</a></li> <li>7. Tseng, W.Y. <i>et al.</i> (2013) Increased soluble CD4 in serum of rheumatoid arthritis patients is generated by matrix metalloproteinase (MMP)-like proteinases. <a href="#">PLoS One. 8 (5): e63963.</a></li> </ol>
Further Reading	<ol style="list-style-type: none"> <li>1. Kwakkenbos, M.J. <i>et al.</i> (2004) The EGF-TM7 family: a postgenomic view.</li> </ol>

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**Storage**

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

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2330>  
10040

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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)  
'M366656:200529'

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