

Datasheet: MCA2330A647

Description:	MOUSE ANTI HUMAN CD312:Alexa Fluor® 647
Specificity:	CD312
Other names:	EMR2
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	2A1
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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	■			Neat

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.

Target Species	Human		
Product Form	Purified IgG conjugated to Alexa Fluor®647- liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		
Immunogen	NIH-3T3 cells stably transfected with EMR2 (EGF1-5) cDNA.		
External Database Links	UniProt: Q9UHX3 Related reagents		
	Entrez Gene:		

Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
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Specificity	Mouse anti Human CD312 antibody, clone 2A1 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. Clone 2A1 specifically recognizes the stalk region of EMR2.
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Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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References	<ol style="list-style-type: none">1. Kwakkenbos, M.J. <i>et al.</i> (2002) The human EGF-TM7 family member EMR2 is a heterodimeric receptor expressed on myeloid cells. J Leukoc Biol. 71 (5): 854-62.2. 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. Blood. 102 (8): 2916-24.3. Yona, S. <i>et al.</i> (2008) Ligation of the adhesion-GPCR EMR2 regulates human neutrophil function. FASEB J. 22 (3): 741-51.4. 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. J Biol Chem. 279 (30): 31823-32.5. Huang, Y.S. <i>et al.</i> (2018) Membrane-association of EMR2/ADGRE2-NTF is regulated by site-specific N-glycosylation. Sci Rep. 8 (1): 4532.
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Further Reading	<ol style="list-style-type: none">1. Kwakkenbos, M.J. <i>et al.</i> (2004) The EGF-TM7 family: a postgenomic view. Immunogenetics. 55 (10): 655-66.
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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. 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.
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Shelf Life	18 months from date of despatch.
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Health And Safety	Material Safety Datasheet documentation #10041 available at:
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Information 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

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

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

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