

## Datasheet: MCA1876PE

**BATCH NUMBER INN1702**

<b>Description:</b>	MOUSE ANTI HUMAN CD147:RPE
<b>Specificity:</b>	CD147
<b>Other names:</b>	NEUROTHELIN
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-M6/1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://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. Suggested working dilutions are given as a guide only. 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 conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1.0 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1%	Bovine Serum Albumin	
	5%	Sucrose	

<b>Immunogen</b>	CD147Rg, consisting of the cDNA coding for the extracellular region of human CD147.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P35613</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">682</a>    BSG    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_323334
<b>Fusion Partners</b>	Spleen cells from immunized Balb/c mice were fused with SP2/0 mouse myeloma cells.
<b>Specificity</b>	<p><b>Mouse anti Human CD147 antibody, clone MEM-M6/1</b> recognizes the human CD147 cell surface antigen, also known as Basigin, EMMPRIN and collagenase stimulatory factor. CD147 is a 385 amino acid single pass type 1 trans-membrane glycoprotein bearing 3 potential N-glycosylation sites, a single N-terminal (distal) <a href="#">Ig-like C2-type domain</a> and a more proximal <a href="#">Ig-like V-type domain</a> in its extracellular region. Mouse anti Human CD147 antibody, clone MEM-M6/1 was raised and screened against recombinant extracellular region of huCD147 expressed in CHO cells, along with a number of other MEM-M6 clones. Epitope mapping indicates that clone MEM-M6/1 binds to an epitope within the distal Ig-like C-2 type domain. This is confirmed by flow cytometry using beads coated with constructs containing only the distal Ig-like or proximal Ig-like domains (<a href="#">Koch et al. 1999</a>).</p> <p>Mouse anti Human CD147 antibody, clone MEM-M6/1 binds to both un-stimulated and phytohemagglutinin (PHA) stimulated (activated) T lymphocytes with levels of CD147 enhanced following PHA stimulation. CD147 is also expressed by peripheral blood and endothelial cells as well as many cultured cells of hematopoietic and non-hematopoietic origin (<a href="#">Koch et al. 1999</a>). In addition to clone MEM-M6/1 we are also able to offer the <a href="#">MEM-M6/6 clone</a> derived from the same fusion which recognizes an epitope in the membrane proximal Ig-like V type domain and has inhibitory effects on CD3 induced T cell activation (Kock et al. 1999)</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Koch, C. <i>et al.</i> (1999) T cell activation-associated epitopes of CD147 in regulation of the T cell response, and their definition by antibody affinity and antigen density. <a href="#">Int Immunol. 11 (5): 777-86.</a></li> <li>2. Yang, Y. <i>et al.</i> (2008) Cyclophilin A up-regulates MMP-9 expression and adhesion of monocytes/macrophages via CD147 signalling pathway in rheumatoid arthritis. <a href="#">Rheumatology (Oxford). 47: 1299-310.</a></li> <li>3. Schneiderhan, W. <i>et al.</i> (2007) Pancreatic stellate cells are an important source of MMP-2 in human pancreatic cancer and accelerate tumor progression in a murine xenograft model and CAM assay. <a href="#">J Cell Sci. 120: 512-9.</a></li> <li>4. Chen, Y. <i>et al.</i> (2009) Upregulation of HAB18G/CD147 in activated human umbilical vein endothelial cells enhances the angiogenesis. <a href="#">Cancer Lett. 278: 113-21.</a></li> <li>5. Schneiderhan, W. <i>et al.</i> (2009) CD147 silencing inhibits lactate transport and reduces</li> </ol>

malignant potential of pancreatic cancer cells in in vivo and in vitro models [Gut. 58: 1391-8.](#)

6. Wright, G.J. *et al.* (2014) Immunogenic compositions and expression systems. [Patent Publication number. US20140093540 A1](#)

7. Huang, Z. *et al.* (2013) Overexpression of CD147 contributes to the chemoresistance of head and neck squamous cell carcinoma cells. [J Oral Pathol Med. 42: 541-6.](#)

8. Hu, J. *et al.* (2010) Involvement of HAb18G/CD147 in T cell activation and immunological synapse formation. [J Cell Mol Med. 14 \(8\): 2132-43.](#)

9. Bernard, S.C. *et al.* (2014) Pathogenic *Neisseria meningitidis* utilizes CD147 for vascular colonization. [Nat Med. 20 \(7\): 725-31.](#)

10. Nassif, X. *et al.* (2015) Cd147 as receptor for pilus-mediated adhesion of meningococci to vascular endothelia. [Patent Publication number US20150110806 A1](#)

11. Trakarnsanga, K. *et al.* (2017) An immortalized adult human erythroid line facilitates sustainable and scalable generation of functional red cells. [Nat Commun. 8: 14750.](#)

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**Storage** Prior to reconstitution store at +4°C. Following 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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1876PE>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

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

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

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