

Datasheet: MCA1876PE

Description:	MOUSE ANTI HUMAN CD147:RPE
Specificity:	CD147
Other names:	NEUROTHELIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MEM-M6/1
Isotype:	IgG1
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 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.

Target Species	Human		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0 ml 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 A		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1%	Bovine Serum Albumin	
	5%	Sucrose	
Immunogen	CD147Rg, consisting of the cDNA coding for the extracellular region of human CD147.		
External Database Links	UniProt: P35613 Related reagents		

Entrez Gene:[682](#) [BSG](#) [Related reagents](#)

Fusion Partners	Spleen cells from immunized Balb/c mice were fused with SP2/0 mouse myeloma cells.
Specificity	Mouse anti Human CD147 antibody, clone MEM-M6/1 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) Ig-like C2-type domain and a more proximal Ig-like V-type domain 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 cytometric studies using beads coated with constructs containing only the distal Ig-like or proximal Ig-like domains (Koch et al. 1999). 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 (Koch et al. 1999). In addition to clone MEM-M6/1 we are also able to offer the MEM-M6/6 clone 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood.
References	1. Koch, C. et al. (1999) T cell activation-associated epitopes of CD147 in regulation of the T cell response, and their definition by antibody affinity and antigen density. Int Immunol. 11 (5): 777-86. 2. Yang, Y. et al. (2008) Cyclophilin A up-regulates MMP-9 expression and adhesion of monocytes/macrophages via CD147 signalling pathway in rheumatoid arthritis. Rheumatology (Oxford). 47: 1299-310. 3. Schneiderhan, W. et al. (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. J Cell Sci. 120: 512-9. 4. Chen, Y. et al. (2009) Upregulation of HAb18G/CD147 in activated human umbilical vein endothelial cells enhances the angiogenesis. Cancer Lett. 278: 113-21. 5. Schneiderhan, W. et al. (2009) CD147 silencing inhibits lactate transport and reduces 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 <i>Neisseria meningitidis</i> 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.
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.

Shelf Life	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

'M307429:170717'

Printed on 25 May 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)