

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 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.

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 from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
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](#)

RRID

AB_323334

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 cytometry 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 ([Kock et al. 1999](#))

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells or 100µl whole blood

References

1. 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.](#)
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.* (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.](#)
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. 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.](#)
6. 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.](#)
7. Bernard, S.C. *et al.* (2014) Pathogenic *Neisseria meningitidis* utilizes CD147 for vascular colonization. [Nat Med. 20 \(7\): 725-31.](#)
8. Nassif, X. *et al.* (2015) Cd147 as receptor for pilus-mediated adhesion of meningococci to vascular endothelia. [Patent Publication number US20150110806 A1](#)
9. 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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1876PE 20487
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 America	Tel: +1 800 265 7376 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
----------------------------------	---	------------------	---	---------------	---

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)

'M419403:230616'

Printed on 31 Mar 2025