

Datasheet: MCA1876APC

Description:	MOUSE ANTI HUMAN CD147:APC
Specificity:	CD147
Other names:	NEUROTHELIN
Format:	APC
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 Allophycocyanin (APC) - lyophilised		
Reconstitution	Reconstitute with 1ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	APC	650	661
Preparation	Purified IgG prepared by affinity chromatography on Protein A		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide		
	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1mg/ml		
Immunogen	CD147Rg, consisting of the cDNA coding for the extracellular region of human CD147.		
External Database Links	UniProt:		

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. <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. Int Immunol. 11 (5): 777-86. 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. Rheumatology (Oxford). 47: 1299-310. 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. J Cell Sci. 120: 512-9. 4. Chen, Y. <i>et al.</i> (2009) Upregulation of HAB18G/CD147 in activated human umbilical vein endothelial cells enhances the angiogenesis. Cancer Lett. 278: 113-21. 5. Schneiderhan, W. <i>et al.</i> (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. <i>et al.</i> (2014) Immunogenic compositions and expression systems. Patent Publication number. US20140093540 A1 7. Huang, Z. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (2014) Pathogenic <i>Neisseria meningitidis</i> utilizes CD147 for vascular colonization. Nat Med. 20 (7): 725-31. 10. Nassif, X. <i>et al.</i> (2015) Cd147 as receptor for pilus-mediated adhesion of meningococci to vascular endothelia. Patent Publication number US20150110806 A1 11. Trakarnsanga, K. <i>et al.</i> (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.
After 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 18 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:APC \(MCA928APC\)](#)

Recommended Useful Reagents

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

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

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