

Datasheet: MCA2882Z

Description:	MOUSE ANTI HUMAN CD147:Preservative Free
Specificity:	CD147
Other names:	NEUROTHELIN
Format:	Preservative Free
Product Type:	Monoclonal Antibody
Clone:	MEM-M6/6
Isotype:	IgG1
Quantity:	0.1 mg

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	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			
Functional Assays	▪			

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present

Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	CD147Rg, consisting of the cDNA coding for the extracellular region of CD147 expressed in CHO cells.
External Database Links	<p>UniProt: P35613 Related reagents</p> <p>Entrez Gene: 682 BSG Related reagents</p>
RRID	AB_2066685
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line.
Specificity	<p>Mouse anti Human CD147 antibody, clone MEM-M6/6 recognizes the Ig-like V-type domain of human CD147, otherwise known as basigin, neurothelin or extracellular matrix metalloproteinase inducer (EMMPRIN). CD147 is a 364 amino acid, ~50-55 kDa single pass type I transmembrane glycoprotein and member of the immunoglobulin gene superfamily, containing a single Ig-like C2-type and a single Ig-like V-type domain. CD147 is broadly expressed on peripheral blood cells, endothelial cells, and increased on T cells following activation. CD147 is also strongly expressed on small lung cancer cells and hepatocellular carcinoma.</p> <p>Biological properties of CD147 include the regulation of T cells, integrin functions and cell adhesion, the stimulation of metalloproteinase (MMP) production by fibroblasts, the promotion of astrocyte outgrowths, and roles in tumour progression, neuronal system function and reproduction (Muramatsu et al. 2003).</p> <p>There are four distinct isoforms of CD147 described in UniProt entry P35613 resulting from alternative splicing or differing promotor usage, the canonical version described here and three alternative truncated isoforms with alterations and deletions to the N-terminal region. The epitope recognized by mouse anti human CD147, clone MEM-M6/6 lies C-terminally to the altered sequences in these isoforms and clone MEM-M6/6 would therefore be expected to bind to all described forms of human CD147.</p> <p>Mouse anti Human CD147, clone MEM-M6/6 inhibits anti-CD3-induced T cell activation, dependent upon antibody concentration (Koch et al. 1999).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.
Western Blotting	MCA2882Z detects a band of approximately 45-60kDa in 293 human fibroblastoid cell lysates under non-reducing conditions.
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. Nassif, X. *et al.* (2015) Cd147 as receptor for pilus-mediated adhesion of meningococci to vascular endothelia. [Patent Publication number US20150110806 A1](#)

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

4. Douglas, A.D. *et al.* (2014) Neutralization of *Plasmodium falciparum* merozoites by antibodies against PfRH5. [J Immunol. 192 \(1\): 245-58.](#)

5. Crosnier C *et al.* (2011) Basigin is a receptor essential for erythrocyte invasion by *Plasmodium falciparum*. [Nature. 480 \(7378\): 534-7.](#)

6. Wanaguru M *et al.* (2013) RH5-Basigin interaction plays a major role in the host tropism of *Plasmodium falciparum*. [Proc Natl Acad Sci U S A. 110 \(51\): 20735-40.](#)

7. Zenonos, Z.A. *et al.* (2015) Basigin is a druggable target for host-oriented antimalarial interventions. [J Exp Med. 212 \(8\): 1145-51.](#)

8. Hahn, J.N. *et al.* (2015) The role of EMMPRIN in T cell biology and immunological diseases. [J Leukoc Biol. 98 \(1\): 33-48.](#)

9. Jongruamklang, P. *et al.* (2018) Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry analysis of 36 blood group alleles among 396 Thai samples reveals region-specific variants. [Transfusion. 58 \(7\): 1752-62.](#)

Storage	Store at -20°C only. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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