

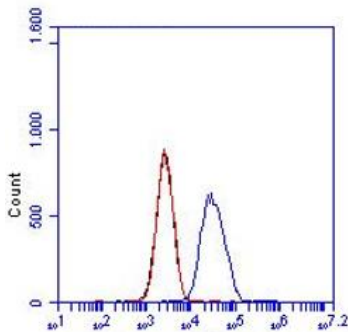
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	PECAM-1 (CD31), Mouse, clone MEC7.46		
Catalog number	HM1013-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.02%NaN3+0.1%BSA	Concentration	100 µg/ml
Host Species	Rat IgG1	Conjugate	None
Endotoxin	N.A.	Purification	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	1,2,5	3	1,4	1			1	
Yes	•	•	•	•			•	
No								
N.D.					•	•		•

N.D. = Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: detection of CD31 in bEND3 cells. Red, black and blue line represent the isotype control, cells only and HM1013 with a concentration of 10 µg/ml.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- FC: Antibody MEC7.46 stains the extracellular domain of mouse PECAM-1; 10⁶ cells were used per sample. No fixation or permeabilization needed. Epitope is sensitive to trypsin! (Ref.1)
- IHC-F: Tissue sections were fixed in acetone for 10 min at RT and pretreated with 0.01% hydrogen peroxide to quench endogenous peroxidases. Normal rabbit serum was used as blocking agent. (Ref.1).
- IHC-P: Serial paraffin-embedded 4 µm sections were stained by H&E, PAS and Azan Histochemistry. The distribution of endothelial (Mec7.46), matrix (laminin) and macrophage (FA/11) markers was evaluated using a standard three-step ABC method and development in 3-amino-9-ethylcarbazole solution. Sections were counterstained for 45 seconds with Harris' haematoxylin at room temperature and mounted in Imsol-mount medium (ref. 3).
- IP: Lysate of 35S-Methionine labeled 5HV cells was used. Molecule of ~130 kDa.
- Positive control: Mouse t-end.1 cells; negative control: L929 cells (Fibroblasts).

General Information

Description

The monoclonal antibody MEC7.46 recognizes the mouse form of the platelet-endothelial cell adhesion molecule (PECAM)-1 (CD31). PECAM-1 is a member of the immunoglobulin superfamily. This heavily glycosylated protein is found in the entire vascular endothelium of adult mice and functions in mediating cellular adhesion by heterophilic and homophilic mechanisms. PECAM-1 is detected within the lymphopoietic islands in the spleen of newborn (day 12) and in the bone marrow of adult mice. Capillary endothelial cells of adult mice also express PECAM-1. The reactivity of the monoclonal antibody MEC7.46 is restricted to the isoform of the molecule that is selectively expressed by endothelial cells. The antibody precipitates a 130 kDa molecule present on the membrane of endothelial

cells of all mouse blood vessels both in normal, inflamed and tumor tissues. The antigen is predominantly present at the lateral borders of endothelial cells as described for human PECAM-1. Staining of MEC7.46 can be seen on capillaries, veins, arteries and liver sinusoids.

Immunogen	Mouse t.end.1 cells (polyoma middle T (PmT)-transformed EC)
Aliases	CD31, platelet-endothelial cell adhesion molecule-1
Gene	Gene name: Pecam-1
References	<ol style="list-style-type: none">1. Vecchi, A et al; Monoclonal antibodies specific for endothelial cells of mouse blood vessels. Their application in the identification of adult and embryonic endothelium. <i>Eur J Cell Biol</i> 1994, <i>63</i>: 2472. Kusters, B et al. Vascular Endothelial Growth Factor-A165 Induces Progression of Melanoma Brain Metastases without Induction of Sprouting Angiogenesis. <i>Cancer Res</i> 2002, <i>62</i>: 3413. Clarijs, R et al; Lymphatics and lymphatic-like structures in melanoma. Thesis 20034. Xu, Q et al; Circulating progenitor cells regenerate endothelium of vein graft atherosclerosis, which is diminished in ApoE-deficient mice. <i>Circ Res</i> 2003, <i>93</i>: e765. Smetsers, T et al; Localization and characterization of melanoma-associated glycosaminoglycans: Differential expression of chondroitin and heparan sulfate epitopes in melanoma. <i>Canc Res</i> 2003, <i>63</i>: 2965
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Brenda Teunissen

Date
26/10/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.