

DATASHEET

CD31 Mouse Monoclonal Antibody(C2230)

CAT. NO. AMA01842

KEY FEATURES

Target	CD31	Source / Host	Mouse
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions under most inflammatory conditions . Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes . Trans-homophilic interaction may play a role in endothelial cell-cell adhesion via cell junctions . Heterophilic interaction with CD177 plays a role in transendothelial migration of neutrophils . Homophilic ligation of PECAM1 prevents macrophage-mediated phagocytosis of neighboring viable leukocytes by transmitting a detachment signal .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:300
IF/ICC	1:100 - 1:300

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Mouse monoclonal antibody to CD31
Specificity	Recognizes endogenous levels of CD31 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human CD31. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 82 kD; Observed: 130 kD
Form/Buffer	Mouse IgG1. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	Platelet endothelial cell adhesion molecule; PECAM-1; EndoCAM; GPIIA ^v ; PECA1; CD31
Gene Symbol	PECAM1
Entrez Gene	5175(Human)
SwissProt	P16284(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

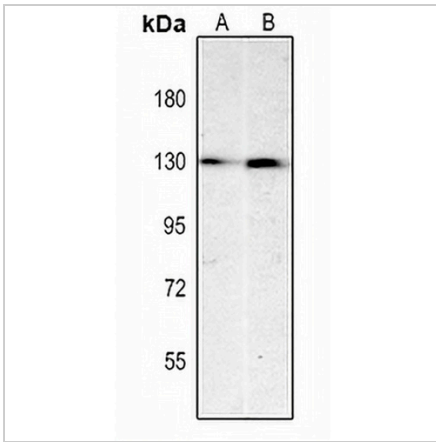
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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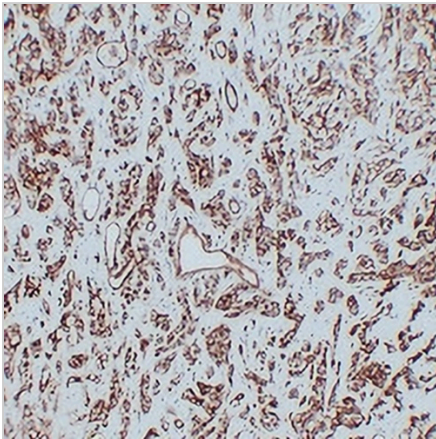
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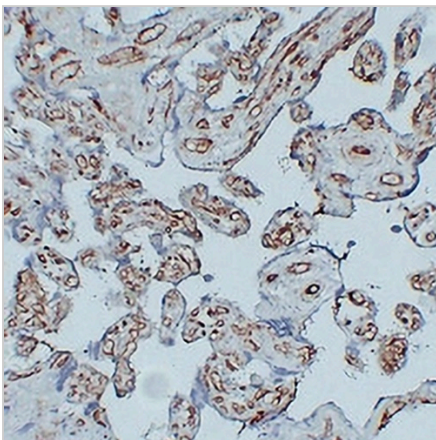
DATA



Western blot analysis of CD31 expression in MDAMB231 (A), HeLa (B) whole cell lysates. (Predicted band size: 82 kD; Observed band size: 130 kD)



Immunohistochemical analysis of CD31 staining in human hemangioendothelioma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



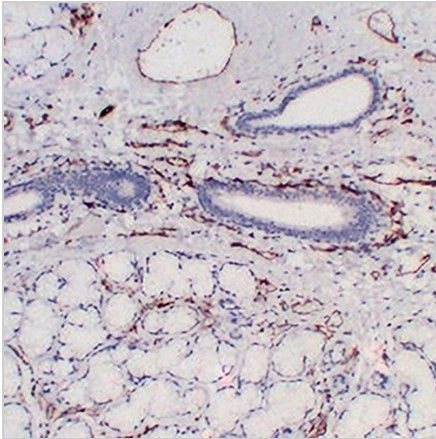
Immunohistochemical analysis of CD31 staining in human placenta formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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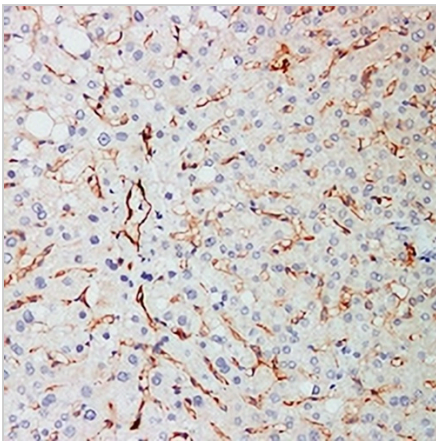
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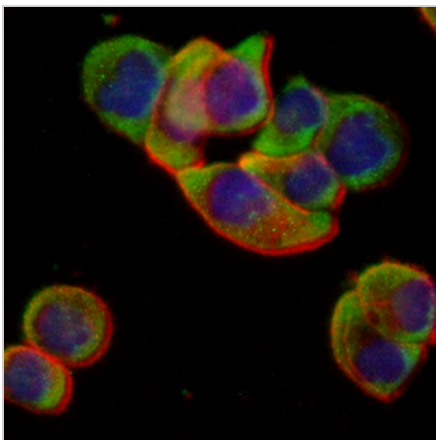
DATA (CONTINUED)



Immunohistochemical analysis of CD31 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunohistochemical analysis of CD31 staining in human liver formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CD31 staining in HUVEC cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.