

CD31 Monoclonal Antibody (HEC7)

Product Details	
Size	200 µg
Species Reactivity	Bovine, Human
Published Species	Rat, Bovine, Mouse, Human
Host/Isotope	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	HEC7
Conjugate	Unconjugated
Immunogen	Human PECAM-1
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	no preservative
Storage Conditions	-20°C
RRID	AB_223516

Applications	Tested	Dilution	Published
Immunofluorescence (IF)	✓	1:50-1:500	7 Publications
Western Blot (WB)	-		2 Publications
Immunocytochemistry (ICC)	✓	1:50-1:500	1 Publication
Immunohistochemistry (IHC)	-		3 Publications
Neutralization (Neu)	-	20 µg/ml	5 Publications
Flow Cytometry (Flow)	✓	3-5 µg/1x10 ⁶ cells	2 Publications
ELISA (ELISA)	-		1 Publication
Immunoprecipitation (IP)	-		1 Publication

Product Specific Information

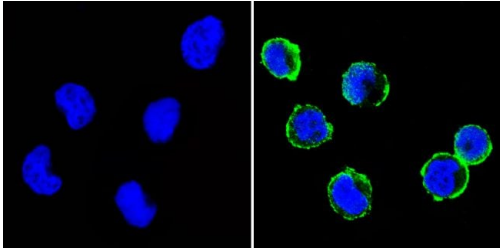
MA3100 targets CD31 in ICC/IF and ACS applications and shows reactivity with Human and Bovine samples.

The MA3100 immunogen is human PECAM-1.

MA3100 detects CD31 which has a predicted molecular weight of approximately 80 kDa.

This product has been tested for endotoxins by limulus amoebocyte lysate (LAL) assay and contains an endotoxin concentration of less than or equal to 10 endotoxin units per milligram (EU/mg).

Product Images For CD31 Monoclonal Antibody (HEC7)

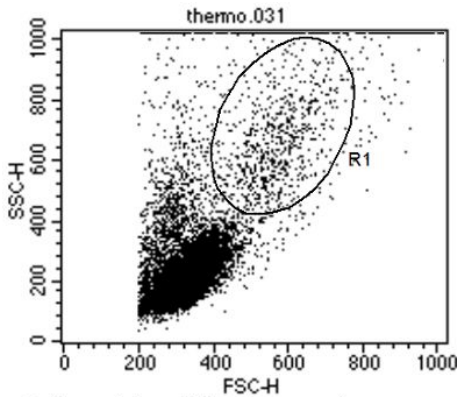


CD31 Antibody (MA3100) in IF

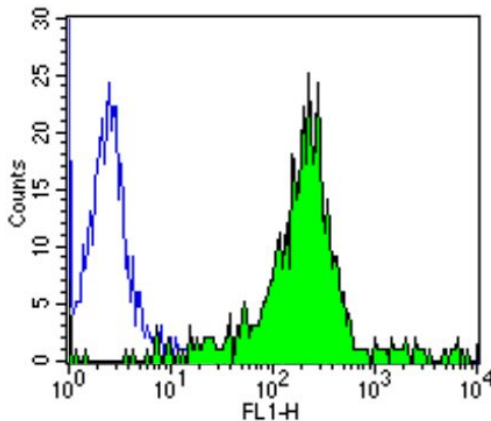
Immunofluorescent analysis of CD31 (green) showing staining in the membrane and cytoplasm of THP-1 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a CD31 monoclonal antibody (Product # MA3100) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.

CD31 Antibody (MA3100) in Flow

Flow cytometry analysis of CD31 in PBMC cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of $1-5 \times 10^6$ cells/mL, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a CD31 monoclonal antibody (Product # MA3100) at a dilution of 0.5 µg/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat anti-mouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.



Cell: peripheral blood monocytes
Concentration: 0.5µg/test (100µl)
Theory location: Membrane



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View more figures on thermofisher.com

22 References

Immunofluorescence (7)

Vitexin reduces epilepsy after hypoxic ischemia in the neonatal brain via inhibition of NKCC1.

"Published figure using CD31 monoclonal antibody (Product # MA3100) in Immunofluorescence"

Authors: Luo WD,Min JW,Huang WX,Wang X,Peng YY,Han S,Yin J,Liu WH,He XH,Peng BW

Species
Not Applicable

Dilution
Not Cited

Year
2018

Oncology letters

Azithromycin effectively inhibits tumor angiogenesis by suppressing vascular endothelial growth factor receptor 2-mediated signaling pathways in lung cancer.

"MA3100 was used in Immunofluorescence to identify VEGF in investigating the inhibition of tumour angiogenesis by the antibiotic, azithromycin, for therapeutic purposes."

Authors: Li F,Huang J, Ji D,Meng Q,Wang C,Chen S,Wang X,Zhu Z,Jiang C,Shi Y,Liu S,Li C

Species
Human
Mouse

Dilution
1:200
1:200

Year
2017

[View more IF references on thermofisher.com](#)

Western Blot (2)

Cell adhesion and migration

CXCR7 expression disrupts endothelial cell homeostasis and causes ligand-dependent invasion.

"Published figure using CD31 monoclonal antibody (Product # MA3100) in Immunofluorescence"

Authors: Totonchy JE,Clepper L,Phillips KG,McCarty OJ,Moses AV

Species
Not Applicable

Dilution
Not Cited

Year
2015

The American journal of pathology

Functional roles for PECAM-1 (CD31) and VE-cadherin (CD144) in tube assembly and lumen formation in three-dimensional collagen gels.

"MA3100 was used in western blot to investigate the role of CD31 and CD144 in tube assembly and lumen formation in three-dimensional collagen gels"

Authors: Yang S,Graham J,Kahn JW,Schwartz EA,Gerritsen ME

Species
Human

Dilution
Not Cited

Year
1999

More applications with references on thermofisher.com

- ICC (1)
- IHC (3)
- Neu (5)
- Flow (2)
- ELISA (1)
- IP (1)

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