

## CD31 Rabbit mAb (AR1186)

### Key Features

Host Species:	Rabbit
Reactivity:	Human, Mouse, Rat
Applications:	WB, IHC, IF, ELISA
Isotype:	IgG, Kappa
MW:	83kD (Calculated) 130kD (Observed)

### Recommended Dilution Ratios

IHC:	1:1000-2000
WB:	1:1000-5000
IF:	1:200-1000
ELISA:	1:5000-20000

### Storage

-15°C to -25°C/1 year (Do not lower than -25°C)

### Basic Information

Clonality	Monoclonal
-----------	------------

### Immunogen Information

Specificity	Endogenous
-------------	------------

### Target Information

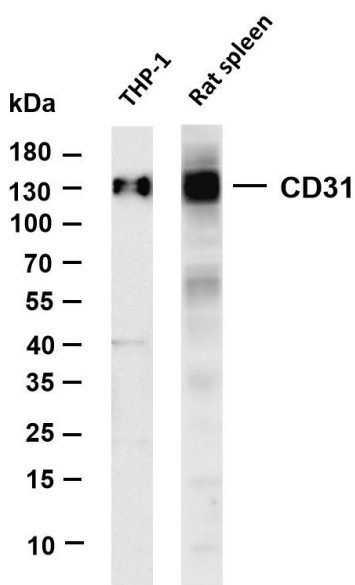
Gene name	PECAM1
Protein Name	Platelet endothelial cell adhesion molecule (PECAM-1) (EndoCAM) (GPIIA') (PECA1) (CD antigen CD31)

Organism	Gene ID	UniProt ID
Human	5175	P16284
Mouse	18613	Q08481
Rat	29583	Q3SWT0

Cellular Localization	Membrane
Tissue specificity	Expressed on platelets and leukocytes and is primarily concentrated at the borders between endothelial cells (PubMed:18388311, PubMed:21464369). Expressed in human

umbilical vein endothelial cells (HUVECs) (at protein level) (PubMed:19342684, PubMed:17580308). Expressed on neutrophils (at protein level) (PubMed:17580308). Isoform Long predominates in all tissues examined (PubMed:12433657). Isoform Delta12 is detected only in trachea (PubMed:12433657). Isoform Delta14-15 is only detected in lung (PubMed:12433657). Isoform Delta14 is detected in all tissues examined with the strongest expression in heart (PubMed:12433657). Isoform Delta15 is expressed in brain, testis, ovary, cell surface of platelets, human umbilical vein endothelial cells (HUVECs), Jurkat T-cell leukemia, human erythroleukemia (HEL) and U-937 histiocytic lymphoma cell lines (at protein level) (PubMed:12433657, PubMed:18388311).

## Validation Data



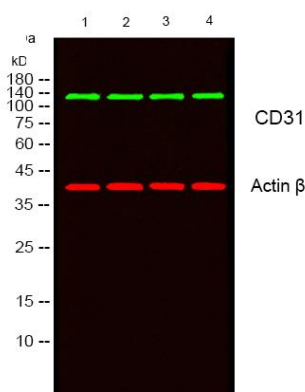
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CD31 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody.

Lane 1: THP-1

Lane 2: Rat spleen

Predicted band size: 83kDa

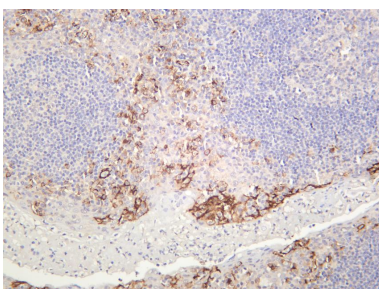
Observed band size: 130kDa



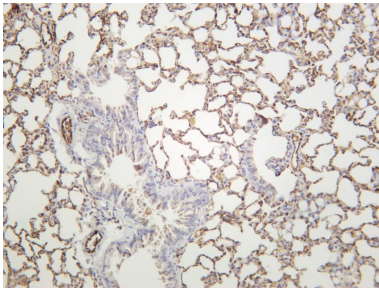
Western blot analysis of lysates from 1) HepG2, 2) K562, 3) L929, 4) MOUSE BRAIN cells.

( Green ) primary antibody was diluted at 1:1000, 4° overnight, secondary antibody was diluted at 1:10000, 37° 1 hour.

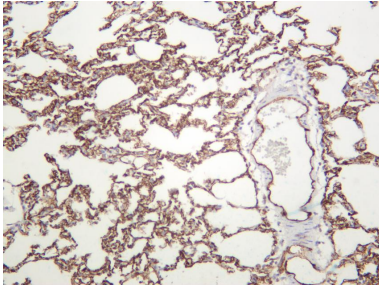
(Red) Actin β Monoclonal Antibody(5B7) antibody was diluted at 1:5000 as loading control, 4° overnight, secondary antibody was diluted at 1:10000, 37° 1 hour.



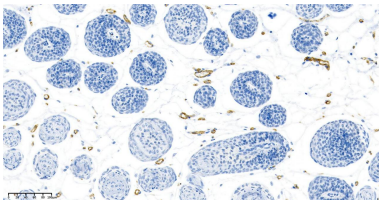
Human tonsil was stained with anti-CD31 rabbit antibody



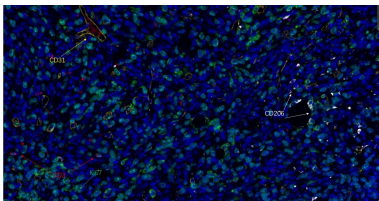
Mouse lung was stained with anti-CD31 rabbit antibody



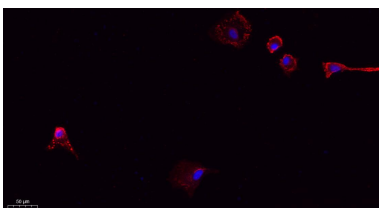
Rat lung was stained with anti-CD31 rabbit antibody



Mouse skin was stained with anti-CD31 Rabbit antibody

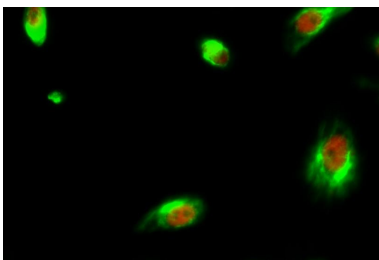


Fluorescence multiplex immunohistochemical analysis of human tonsil tissue (formalin-fixed paraffin-embedded section). The immunostaining was performed by Sextuple-Fluorescence kit. CD3 rabbit mAb(RED), Ki67 rabbit mAb(GREEN), CD31 rabbit mAb(YELLOW), CD206 Rabbit mAb(WHITE) was tested with different TSA Fluorescence reagent. Microscopy and pseudocoloring of individual dyes was performed using a Slideviewer Imaging System (Excilone).



Immunofluorescence analysis of A549.

1. primary Antibody(red) was diluted at 1:200(4°C overnight).
2. Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).
3. DAPI (blue) 10min.



Immunofluorescence analysis of Hela cell.

1. BMP-2 Antibody(green) was diluted at 1:200(4° overnight). (red) was diluted at 1:200(4° overnight).
2. Goat Anti Rabbit Alexa Fluor 488 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 was diluted at 1:1000(room temperature, 50min).