

## Product datasheet for **UM500031CF**

### CD31 (PECAM1) Mouse Monoclonal Antibody [Clone ID: UMAB31]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB31
Applications:	FC, IHC, WB
Recommended Dilution:	WB 1:500, IHC 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PECAM1(NP_000433) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	82.4 kDa
Gene Name:	platelet and endothelial cell adhesion molecule 1
Database Link:	<a href="#">NP_000433</a> <a href="#">Entrez Gene 5175 Human</a> <a href="#">P16284</a>

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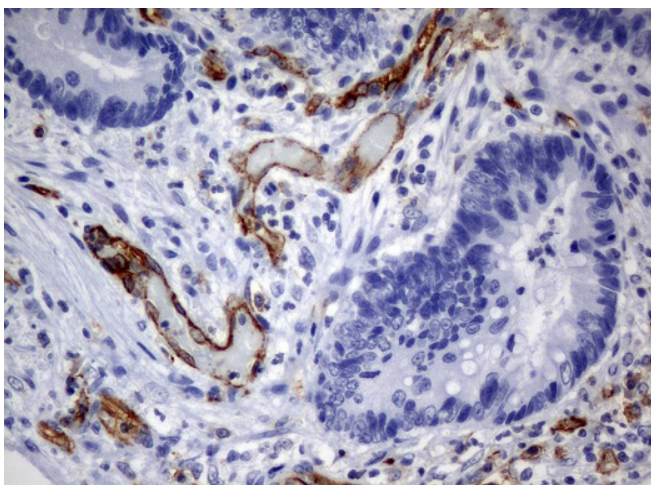
**Background:** The protein encoded by this gene is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. [provided by RefSeq]

**Synonyms:** CD31; CD31/EndoCAM; endoCAM; GPIIA'; PECA1; PECAM-1

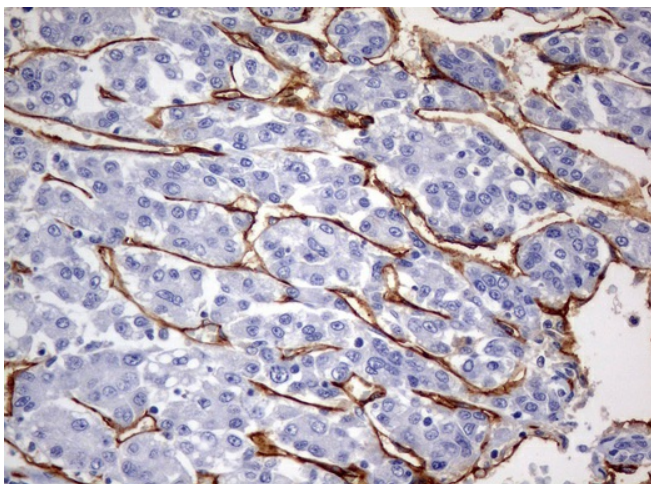
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

**Protein Pathways:** Cell adhesion molecules (CAMs), Leukocyte transendothelial migration

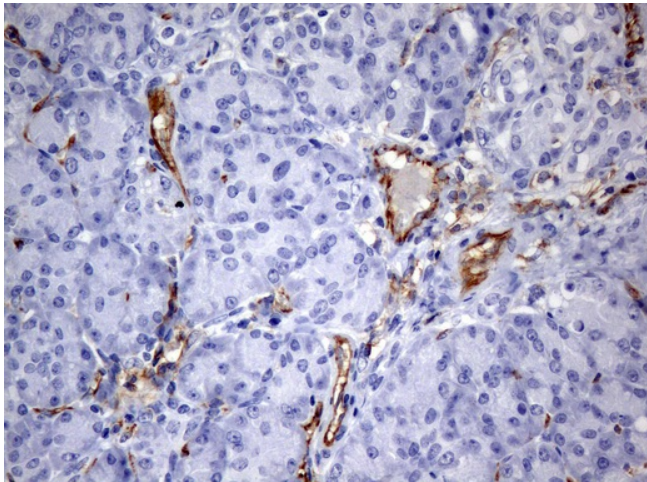
### Product images:



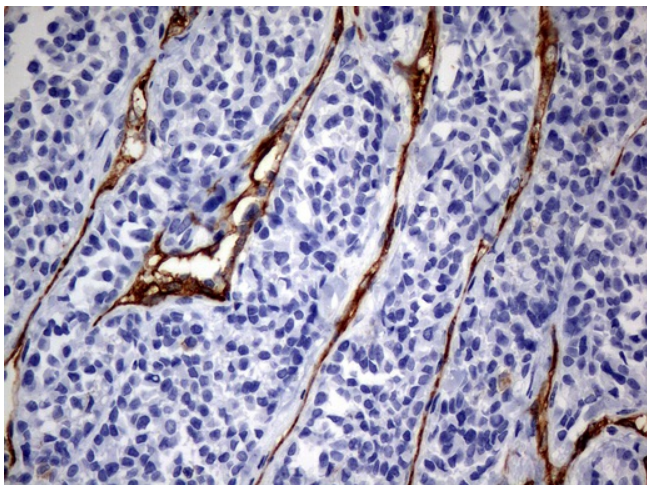
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of colon tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



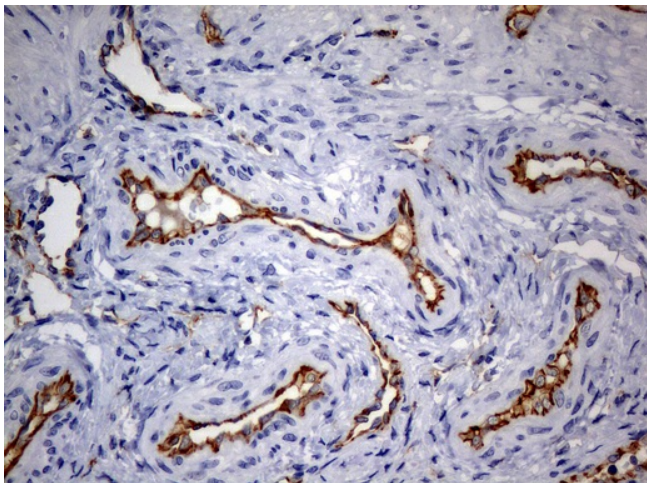
Immunohistochemical staining of paraffin-embedded Carcinoma of liver tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunohistochemical staining of paraffin-embedded pancreas tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

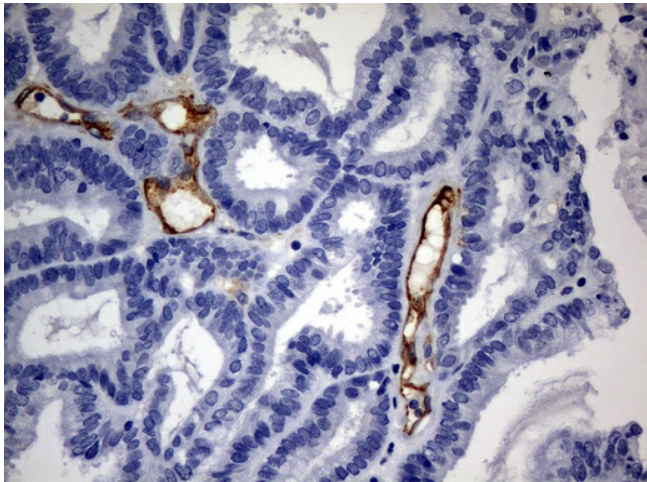


Immunohistochemical staining of paraffin-embedded Carcinoma of thyroid tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

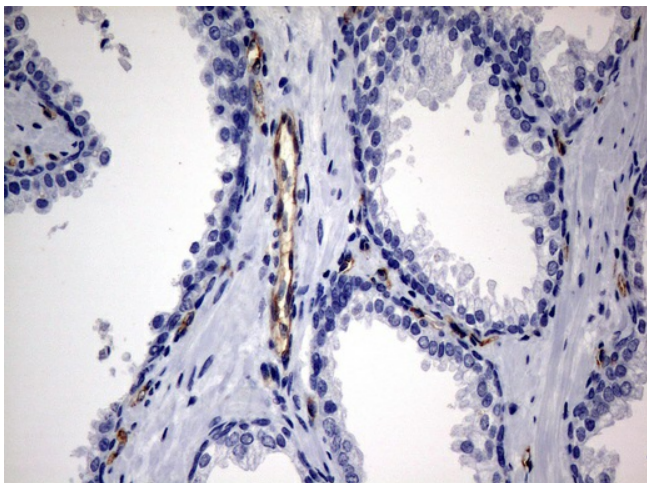


Immunohistochemical staining of paraffin-embedded endometrium tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

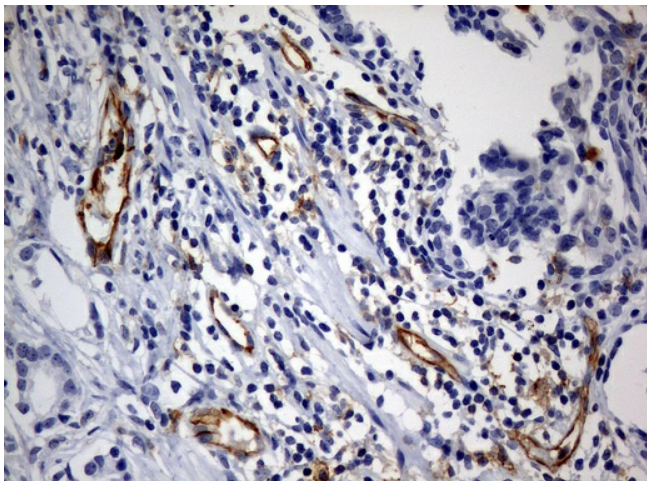




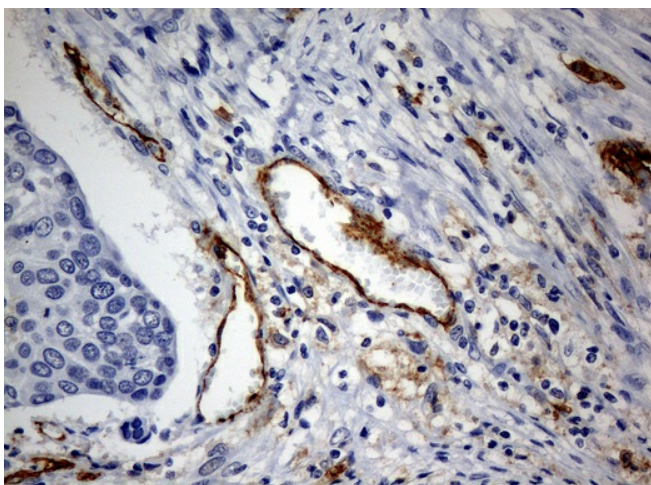
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of endometrium tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



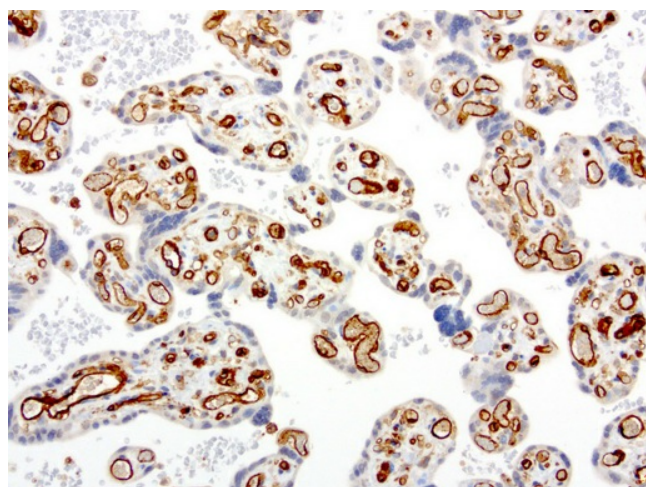
Immunohistochemical staining of paraffin-embedded prostate tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



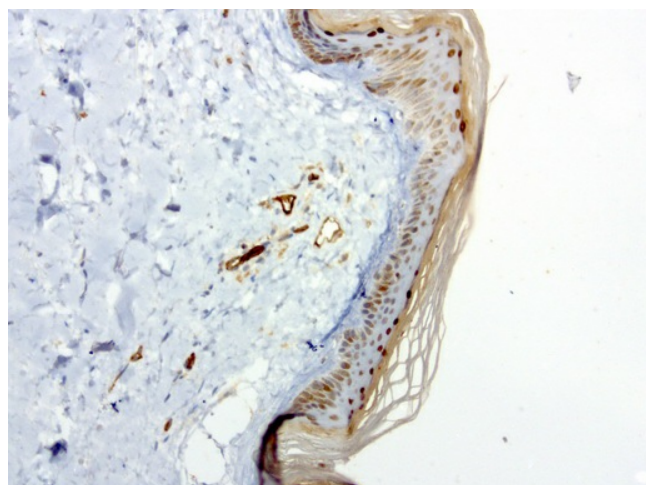
Immunohistochemical staining of paraffin-embedded Carcinoma of prostate tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunohistochemical staining of paraffin-embedded Carcinoma of bladder tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB31, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

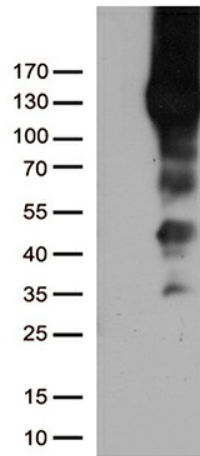


Immunohistochemical staining of paraffin-embedded human placenta using anti-PECAM clone UMAB31 mouse monoclonal antibody ([UM500031]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Citrate pH6.0 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic and membraneous staining is seen in the endothelia cells and weak staining in the trophoblast.

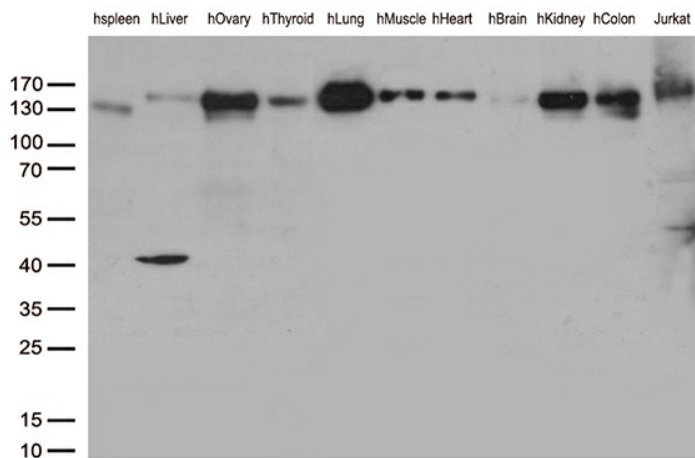


Immunohistochemical staining of paraffin-embedded human skin using anti-PECAM clone UMAB31 mouse monoclonal antibody ([UM500031]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Citrate pH6.0 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic and membraneous staining is seen in the vasular endothelia cells.

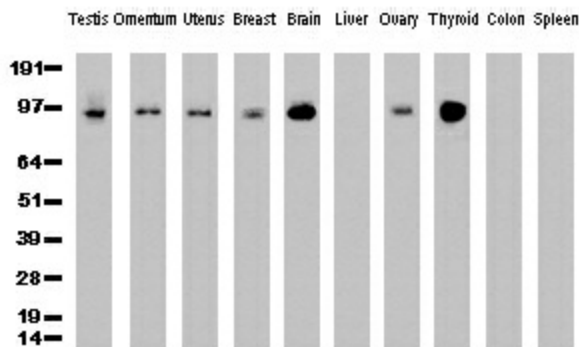




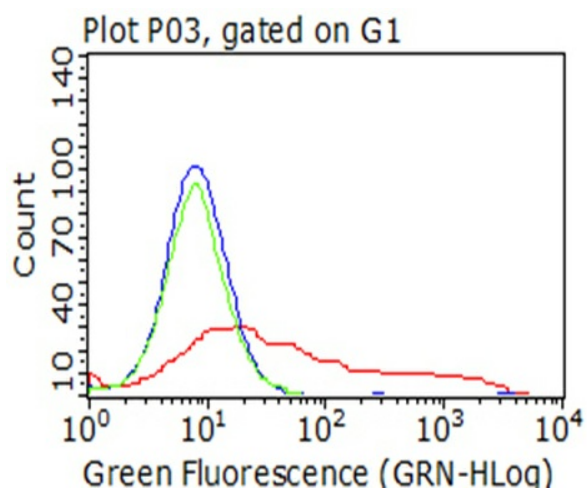
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PECAM1 ([RC208654], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PECAM1 mouse monoclonal antibody.1:500`



Western blot analysis of extracts (35ug) from 10 different human tissues and Jurkat cell lines by using anti-PECAM1 monoclonal antibody. 1:250



Western Blot analysis of 10 different human tissue lysates (10ug) by using anti-PECAM1 monoclonal antibody (clone UMAB31, 1:500)



Living HEK293T cells transfected with either [RC208654] plasmid (red) or empty vector (blue) were immunostained by anti-PECAM1 antibody ([UM500031]) or isotype control antibody (green), and then analyzed by flow cytometry (1:100).