

## Product datasheet for **UM500029CF**

### CD31 (PECAM1) Mouse Monoclonal Antibody [Clone ID: UMAB29]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB29
Applications:	10k-ChIP, FC, IF, IHC, WB
Recommended Dilution:	WB 1:500, IHC 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
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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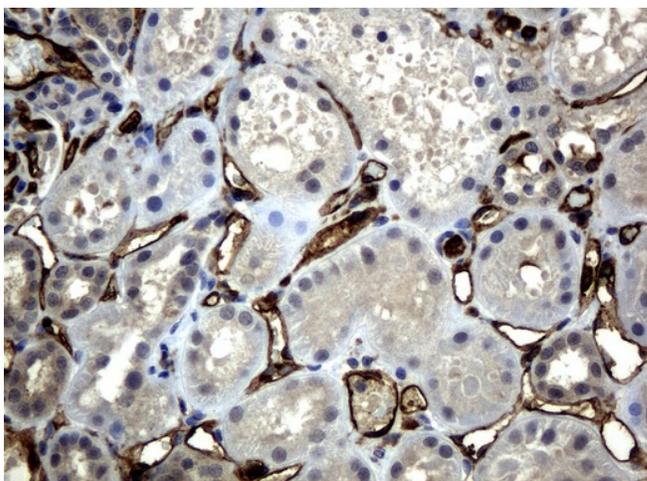
**Background:** The protein encoded by this gene is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. [provided by RefSeq]

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

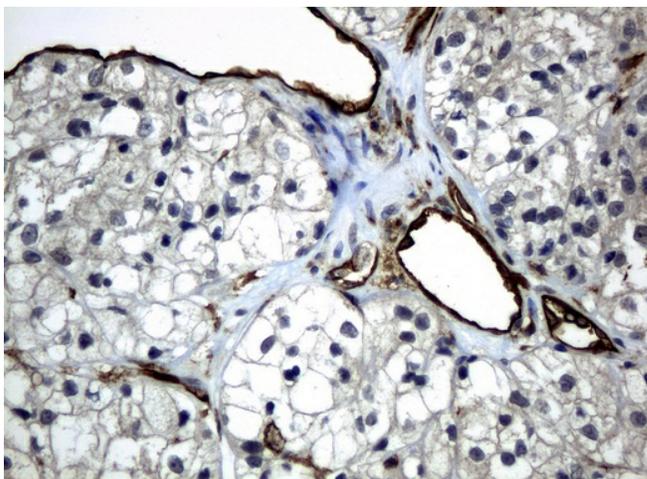
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

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

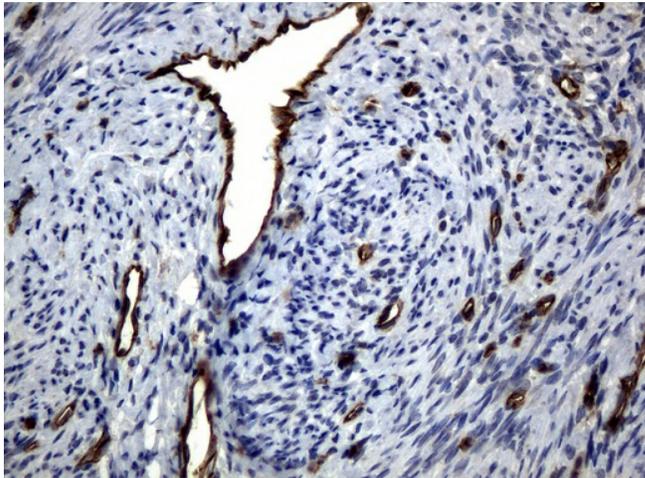
### Product images:



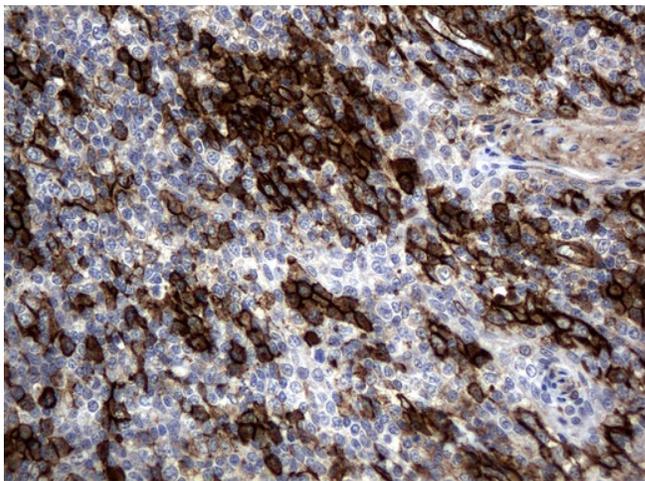
Immunohistochemical staining of paraffin-embedded Kidney tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB29, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



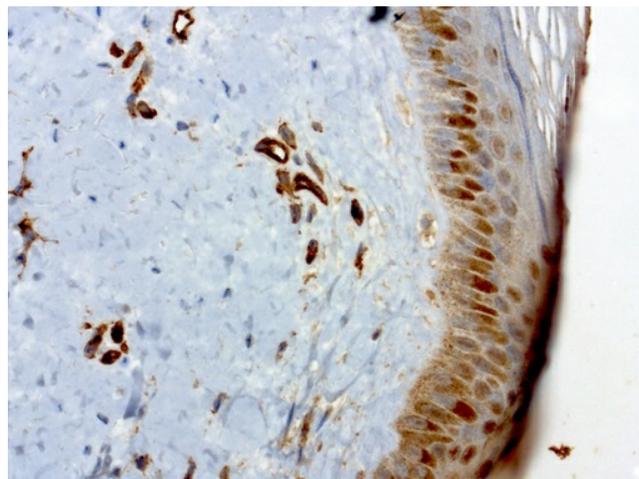
Immunohistochemical staining of paraffin-embedded Carcinoma of kidney tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB29, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



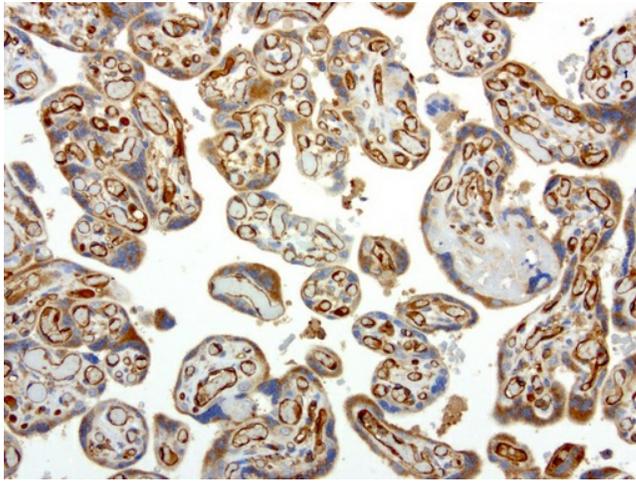
Immunohistochemical staining of paraffin-embedded endometrium tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB29, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



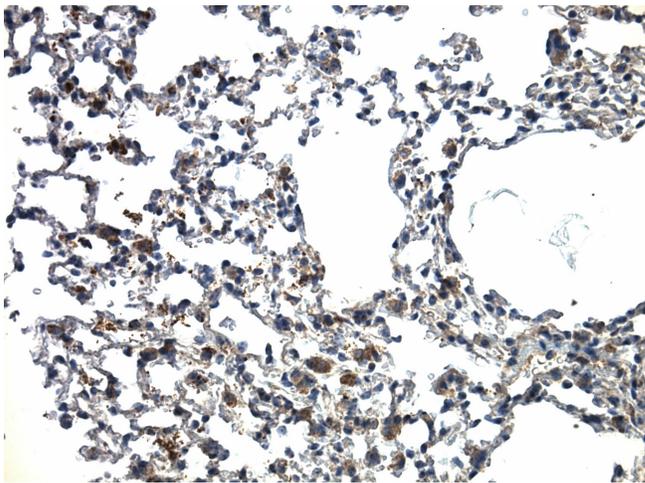
Immunohistochemical staining of paraffin-embedded lymph node tissue using anti-PECAM1 mouse monoclonal antibody. (Clone UMAB29, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



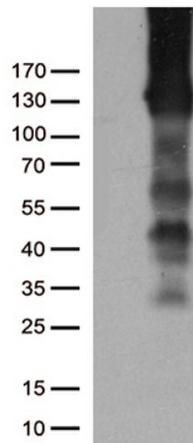
Immunohistochemical staining of paraffin-embedded human skin using anti-PECAM clone UMAB29 mouse monoclonal antibody ([UM500029]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Citrate pH6.0 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic and membrane staining is seen in the endothelial cells.



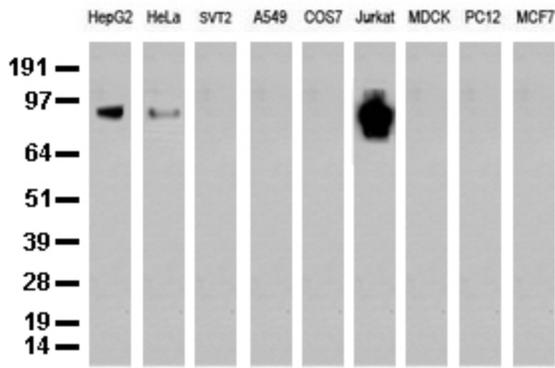
Immunohistochemical staining of paraffin-embedded human placenta using anti-PECAM clone UMAB29 mouse monoclonal antibody ([UM500029]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Citrate pH6.0 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic and membranous staining is seen in the endothelia cells and weak staining in the trophoblast.



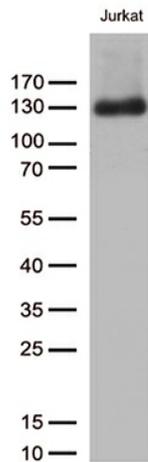
Immunohistochemical staining of paraffin-embedded mouse lung tissue using anti-CD31 (PECAM1) clone UMAB29 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500029] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.



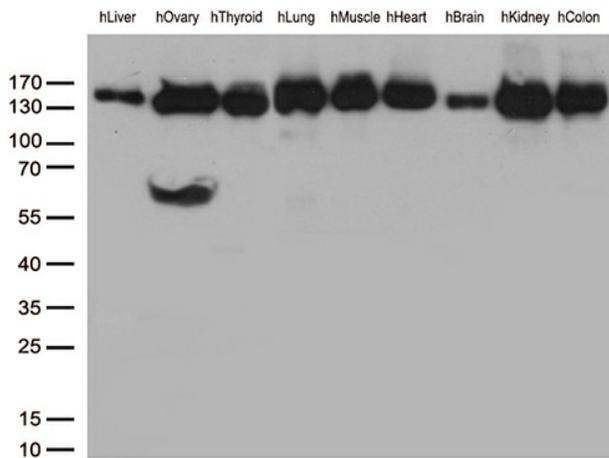
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PECAM1 ([RC208654], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PECAM1 mouse monoclonal antibody.1:500`



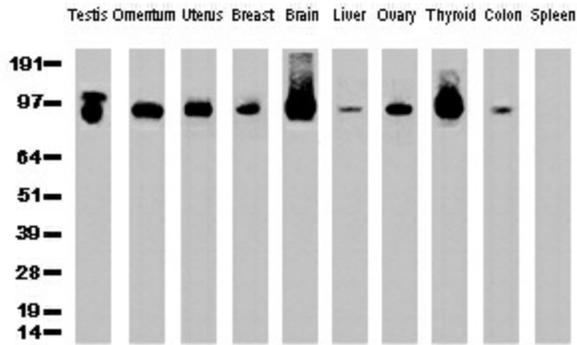
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PECAM1 monoclonal antibody (Clone UMAB29) at 1:500.



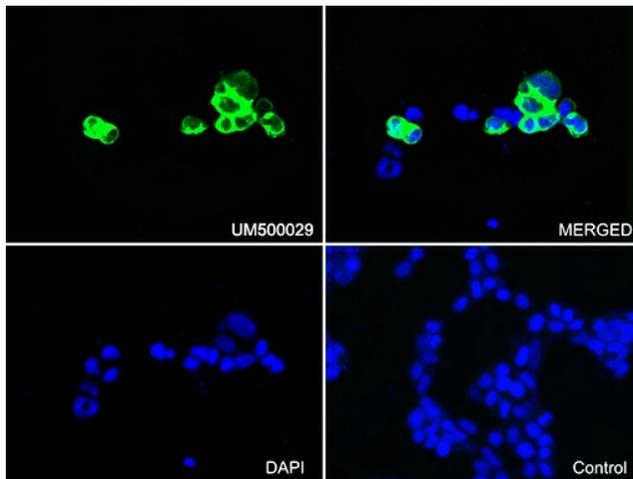
Western blot analysis of extracts (35ug) from Jurkat cell line by using anti-PECAM1 monoclonal antibody. 1:500



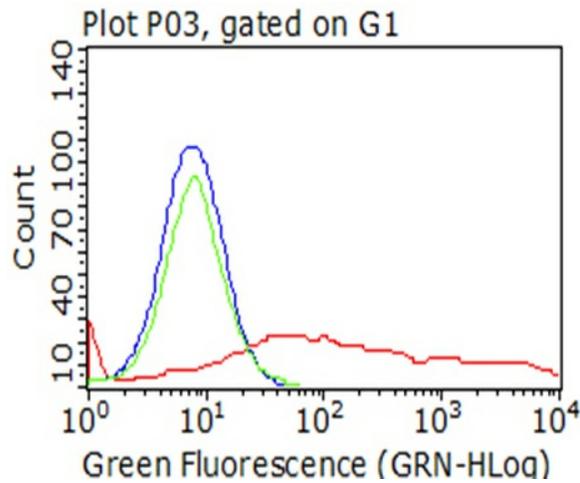
Western blot analysis of extracts (35ug) from 9 different human tissues by using anti-PECAM1 monoclonal antibody. 1:250



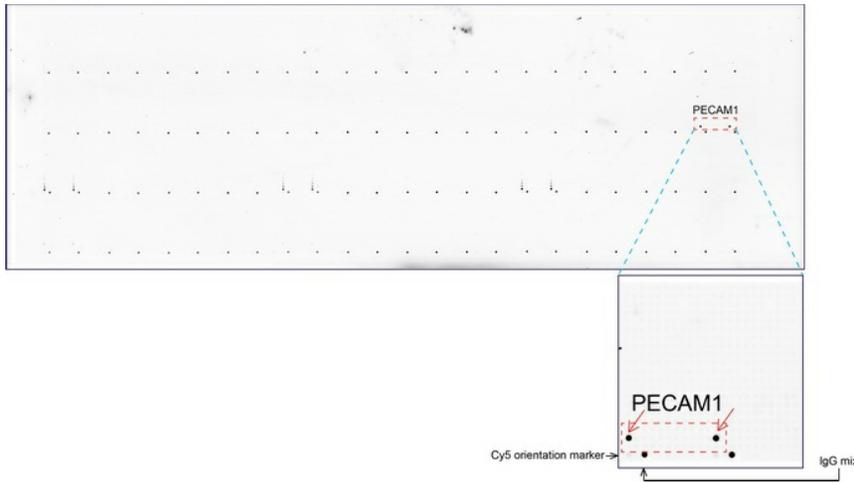
Western Blot analysis of 10 different human tissue lysates (10ug) by using anti-PECAM1 monoclonal antibody (clone UMAB25, 1:500)



Immunofluorescent staining of 293T cells transiently transfected by pCMV6-ENTRY PECAM1 ([RC208654]) using anti-PECAM1 mouse monoclonal antibody ([UM500029], green, upper left; merged, upper right). Cell nuclei were stained with DAPI (blue, lower left). 293T cells transfected with empty vector plasmid served as negative control ( merged, lower right) (1:100).



Living HEK293T cells transfected with either [RC208654] plasmid (red) or empty vector (blue) were immunostained by anti-PECAM1 antibody ([UM500029]) or isotype control antibody (green), and then analyzed by flow cytometry (1:100).



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-PECAM1 mouse monoclonal antibody (Clone UMAB29). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification. These data show that UltraMAB anti-PECAM1 (Clone UMAB29) very specifically recognizes PECAM1 antigen on OriGene protein microarray chip.