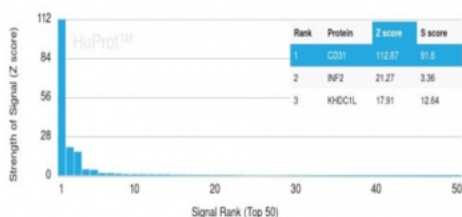


## CD31 Antibody / PECAM-1 [clone PECAM1/3539] (V4531)

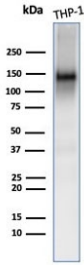
Catalog No.	Formulation	Size
V4531-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4531-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4531SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

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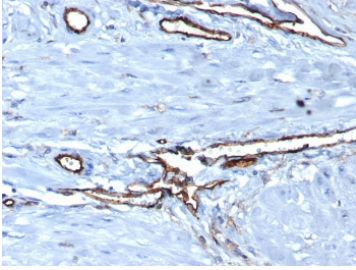
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG, kappa
<b>Clone Name</b>	PECAM1/3539
<b>Purity</b>	Protein A/G affinity
<b>UniProt</b>	P16284
<b>Localization</b>	Cell surface, Cytoplasm
<b>Applications</b>	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
<b>Limitations</b>	This CD31 antibody is available for research use only.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD31 antibody (clone PECAM1/3539) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a mAb to its intended target. A mAb is considered to specific to its intended target, if the mAb has an S-score of at least 2.5. For example, if a mAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that mAb to protein X is equal to 29.



Western blot testing of human THP-1 cell lysate with CD31 antibody (clone PECAM1/3539). Expected molecular weight: 83-130 kDa depending on level of glycosylation.



IHC staining of FFPE human placental tissue with CD31 antibody (clone PECAM1/3539). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

## Description

CD31 (PECAM-1) is a transmembrane glycoprotein member of the immunoglobulin supergene family of adhesion molecules. CD31 is expressed by stem cells of the hematopoietic system and is primarily used to identify and concentrate these cells for experimental studies as well as for bone marrow transplantation. Anti-CD31 has shown to be highly specific and sensitive for vascular endothelial cells. Staining of nonvascular tumors (excluding hematopoietic neoplasms) is rare. CD31 mAb reacts with normal, benign, and malignant endothelial cells which make up blood vessel lining. The level of CD31 expression can help to determine the degree of tumor angiogenesis, and a high level of CD31 expression may imply a rapidly growing tumor and potentially a predictor of tumor recurrence.

## Application Notes

Optimal dilution of the CD31 antibody should be determined by the researcher.

## Immunogen

A recombinant partial protein sequence (within amino acids 625-738) from the human protein was used as the immunogen for the CD31 antibody.

## Storage

Aliquot the CD31 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.