

# CD31 / PECAM-1 (Endothelial Cell Marker); Clone C31.7 (Concentrate)

**Availability/Contents:**

<u>Item #</u>	<u>Volume</u>
RA0256-C.5	0.5 ml

**Description:**

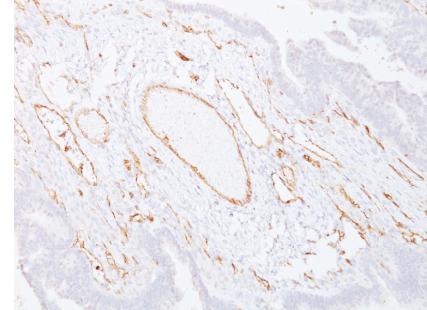
Species:	Mouse
Immunogen:	Human recombinant CD31 protein
Clone:	C31.7
Isotype:	IgG1, kappa
Entrez Gene ID:	5175 (Human); 18613 (Mouse)
Hu Chromosome Loc.:	17q23.3
Synonyms:	EndoCAM; PECA1; Platelet Endothelial Cell Adhesion Molecule 1; GPIIA'
Mol. Weight of Antigen:	~100kDa (endothelium) and ~130kDa (platelets)
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Anti-CD31 has shown to be highly specific and sensitive for vascular endothelial cells. Staining of nonvascular tumors (excluding hematopoietic neoplasms) is rare. Anti-CD31 reacts with normal, benign, and malignant endothelial cells which make up blood vessel lining.
Background:	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. 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 be a predictor of tumor recurrence.
Species Reactivity:	Human, Cynomolgus Monkey, and Rabbit. Others not known.
Positive Control:	Jurkat, CCRF-CEM or K-562 Cells. Tonsil, Angiosarcoma.
Cellular Localization:	Cell surface and cytoplasmic
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1 µg/million cells Immunofluorescence: 1-2 µg/ml Western Blotting: 0.5-1 µg/ml Immunoprecipitation: 1-2 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

 ScyTek Laboratories, Inc.  
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**Uses/Limitations:** Not to be taken internally.  
For Research Use Only.  
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
Do not use if reagent becomes cloudy.  
Do not use past expiration date.  
Non-Sterile.



**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

Formalin-fixed, paraffin-embedded human tonsil stained with CD31; Clone C31.7. Note cell membrane staining of endothelial cells.

**Procedure:**

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with EDTA Buffer (10X) HIER Solution (pH 8.0) (ScyTek catalog# ETA).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
Do not pipette by mouth.  
Avoid contact of reagents and specimens with skin and mucous membranes.  
Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Gratzinger D *et. al.* Am J Clin Pathol 131:264-278 (2009).

**Warranty:**

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

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