P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

CD31; Clone C31.7
(Concentrate)

Availability/Contents:

Item #	Volume
A00110-C	1 ml

Description:

Species:	Mouse
Immunogen:	Membrane preparation of a spleen from a patient with hairy cell leukemia was used as immunogen for this antibody.
Clone:	C31.7
Isotype:	IgG1, Kappa
Concentration:	100µg/ml
Format:	This antibody is provided in a phosphate buffered saline containing 1% BSA.
Specificity:	This antibody recognizes a 100kDa glycoprotein in endothelial cells and 130kDa in platelets. This antibody reacts with endothelial cells in normal tissues and in benign and malignant proliferations. In cryostat sections and blood smears the antibody also stains megakaryocytes, platelets and occasionally plasma cells. It reacts weakly with mantle zone B cells, peripheral T cells, and neutrophils. Antibody to CD31 is of value in the study of benign and malignant vascular tumors. Staining for CD31 has also been used to measure angiogenesis, which reportedly predicts tumor recurrence.
Background:	CD31 (PECAM-1, or platelet endothelial cell adhesion molecule-1) is a surface protein expressed by endothelial cells, monocytes, platelets, granulocytes, and lymphocyte subsets, and makes up a large portion of endothelial intercellular junctions. CD31 is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. Reports indicate that CD31 interacts with CD38 and is involved in cellular interactions resulting in wound healing and angiogenesis. Expression of CD31 on CD4+ T lymphocytes, helps to control T lymphocyte activation, because in the absence of CD31, T cells have a greater propensity to become activated, resulting in increased susceptibility to become apoptotic. This impact of CD31 loss becomes most pronounced during severe, inflammatory, and immunological stresses such as those caused by systemic Salmonella infection. This identifies a novel role for CD31 in regulating CD4 T homeostasis.
Species Reactivity:	Human.
Positive Control:	Tonsil
Cellular Localization:	Primarily membrane.
Titer/Working Dilution:	Immunohistochemistry: 1:50 – 1:100 Western Blot: 1-3µg/ml
Microbiological State:	This product is not sterile.

Storage: 2° C – 8° C

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CE IVD

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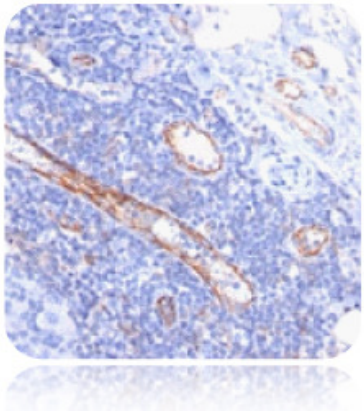
Uses/Limitations:

Not to be taken internally.
For In Vitro Diagnostic Use.
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.
Use caution when handling reagents.
Non-Sterile.



Ordering Information and Current Pricing at www.scytek.com

Procedure:

1. **Tissue Section Pretreatment is REQUIRED:** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500) or EDTA-Saline Buffer, pH 8.0 (ScyTek Catalog# ETA500, see IFU for instructions).

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. Schmidt D; von Hochstetter AR. Pathology, Research and Practice, 191(5):410-414 (1995).
2. Sciot R; Delaere P; Van Damme B; Desmet V. Histopathology, 26(2):177-180 (1195).
3. Charpin C; Devictor B; Bergeret D; Andrac L; Boulat J; Horschowski N; Lavaut MN; Piana L. American Journal of Clinical Pathology, 103(4):443-448 (1995).
4. Bossi P; Viale G; Lee AK; Alfano R; Coggi G; Bosari S. Cancer Research, 55(21):5049-5053 (1995).
5. Newton-Nash DK, Newman PJ. J Immunol, 163: 682-688 (1999).
6. Ross EA, Coughlan RE, Flores-Langarica A, et al. J Immunol. 187(4):1553-1565 (2011).

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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