

**Mouse Anti-CD31 (PECAM-1) [JC70A]: MC0514, MC0514RTU7**

**Intended Use:** For Research Use Only

**Description:** CD31, also known as PECAM-1, is a 130 kDa integral membrane glycoprotein found on the surface of endothelial cells, platelets and some hematopoietic cells. The antibody labels endothelial cells of arteries, arterioles, venules, veins, and non-sinusoidal capillaries in various tissues. CD31 is the most sensitive and specific endothelial cell marker. It is useful for detection of tumors with endothelial origin. In addition, CD31 has been used to identify vascular invasion of tumors, and assessment of angiogenesis which is a prognostic marker for many types of cancer.

**Specifications**

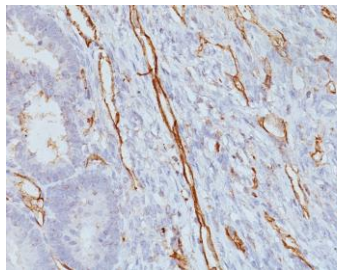
Clone: JC70A  
Source: Mouse  
Isotype: IgG1k  
Reactivity: Human, rabbit, cynomolgus monkey  
Localization: Membrane, cytoplasm  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, Flow Cyt., IF, WB  
Package:

| Description                 | Catalog No. | Size |
|-----------------------------|-------------|------|
| CD31 (PECAM-1) Concentrated | MC0514      | 1 ml |
| CD31 (PECAM-1) Prediluted   | MC0514RTU7  | 7 ml |

**IHC Procedure\***

Positive Control Tissue: Placenta, angiosarcoma  
Concentrated Dilution: 50-200  
Pretreatment: Tris EDTA pH9.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human colon carcinoma stained with anti-CD31 using DAB

**References:**

1. Hypoxia promotes glioma-associated macrophage infiltration via periostin and subsequent M2 polarization by upregulating TGF-beta and M-CSFR. Guo X, et al. *Oncotarget* 7:80521-80542, 2016.
2. Enhancement of Ischemic Wound Healing by Spheroid Grafting of Human Adipose-Derived Stem Cells Treated with Low-Level Light Irradiation. Park IS, et al. *PLoS One* 10:e0122776, 2015.
3. Utility of a human-mouse xenograft model and in vivo near-infrared fluorescent imaging for studying wound healing. *Wound J* 12:699-705, 2015.