

**Rabbit Anti-CD133/Prominin-1 (PROM1) [MD49R]: RM0202, RM0202RTU7**

**Intended Use:** For Research Use Only

**Description:** CD133, also known as prominin or AC133, is a marker frequently found on multipotent progenitor cells, including immature hematopoietic stem and progenitor cells. The protein has been extensively used as a stem cell marker for normal and cancerous tissues. May play a role in cell differentiation, proliferation and apoptosis. Binds cholesterol in cholesterol-containing plasma membrane microdomains and may play a role in the organization of the apical plasma membrane in epithelial cells. During early retinal development acts as a key regulator of disk morphogenesis. Involved in regulation of MAPK and Akt signaling pathways. In neuroblastoma cells suppresses cell differentiation such as neurite outgrowth in a RET-dependent manner.

**Specifications:**

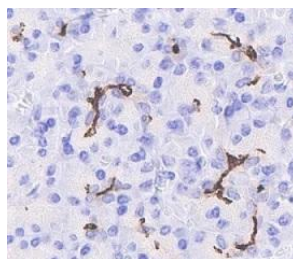
Clone: MD49R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Immunogen: Recombinant fragment of Human CD133 aa 250-400  
 Localization: Secreted  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, WB  
 Package:

| Description                           | Catalog No. | Size |
|---------------------------------------|-------------|------|
| CD133/Prominin-1 (PROM1) Concentrated | RM0202      | 1 ml |
| CD133/Prominin-1 (PROM1) Prediluted   | RM0202RTU7  | 7 ml |

**IHC Procedure\*:**

Positive Control Tissue: Colonic adenocarcinoma, kidney, muscle  
 Concentrated Dilution: 25-100  
 Pretreatment: Tris EDTA pH9.0, 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 pancreas stained with anti-CD133 using DAB

**References:**

1. Functional links between gelatinase B/matrix metalloproteinase-9 and prominin-1/CD133 in diabetic retinal vasculopathy and neuropathy. Mohammad G, et al. Prog Retin Eye Res 43:76-91, 2014.
2. PDGFR-β (+) perivascular cells from infantile hemangioma display the features of mesenchymal stem cells and show stronger adipogenic potential in vitro and in vivo. Yuan SM, et al. Int J Clin Exp Pathol 7:2861-70, 2014.
3. Implication of tumor stem-like cells in the tumorigenesis of sporadic paraganglioma. Yang Y, et al. Med Oncol 30:659, 2013.
4. The prognostic significance of aldehyde dehydrogenase 1A1 (ALDH1A1) and CD133 expression in early stage non-small cell lung cancer. Alamgeer M, et al. Thorax N/A:N/A, 2013.

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Rev. B