

**Anti-CD133 Monoclonal Antibody**  
**Mouse Anti Human Monoclonal Antibody**  
**Catalog # AP53413****Specification**

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**Anti-CD133 Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O43490</a>
Other Accession	<a href="#">NM_006017</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Immunogen	Purified recombinant human Prominin-1 protein fragments expressed in E.coli.
Purification	Affinity purified
Calculated MW	133 KDa

**Anti-CD133 Monoclonal Antibody - Additional Information****Gene ID** 8842**Other Names**

Prominin-1;Antigen AC133;Prominin-like protein 1;CD133.

**Dilution**

WB~~1:1000

**Format**

Purified mouse monoclonal in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide,0.1mg/mlBSA and 50% glycerol.

**Storage**

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

**Anti-CD133 Monoclonal Antibody - Protein Information****Name** PROM1**Synonyms** PROML1**Function**

May play a role in cell differentiation, proliferation and apoptosis (PubMed:<a href="http://www.uniprot.org/citations/24556617" target="\_blank">24556617</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/20818439" target="\_blank">20818439</a>).

#### Cellular Location

Apical cell membrane; Multi-pass membrane protein. Cell projection, microvillus membrane; Multi-pass membrane protein. Cell projection, cilium, photoreceptor outer segment Endoplasmic reticulum. Endoplasmic reticulum-Golgi intermediate compartment. Note=Found in extracellular membrane particles in various body fluids such as cerebrospinal fluid, saliva, seminal fluid and urine

#### Tissue Location

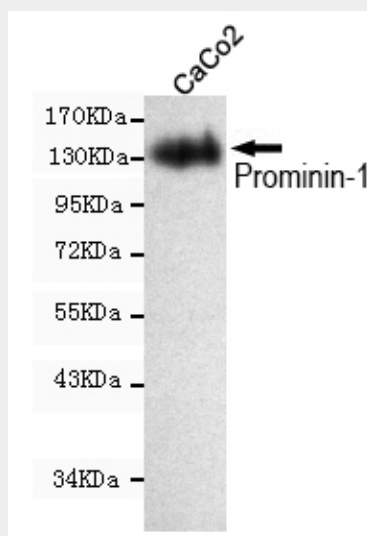
Isoform 1 is selectively expressed on CD34 hematopoietic stem and progenitor cells in adult and fetal bone marrow, fetal liver, cord blood and adult peripheral blood. Isoform 1 is not detected on other blood cells. Isoform 1 is also expressed in a number of non-lymphoid tissues including retina, pancreas, placenta, kidney, liver, lung, brain and heart. Found in saliva within small membrane particles. Isoform 2 is predominantly expressed in fetal liver, skeletal muscle, kidney, and heart as well as adult pancreas, kidney, liver, lung, and placenta. Isoform 2 is highly expressed in fetal liver, low in bone marrow, and barely detectable in peripheral blood Isoform 2 is expressed on hematopoietic stem cells and in epidermal basal cells (at protein level). Expressed in adult retina by rod and cone photoreceptor cells (at protein level)

### Anti-CD133 Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

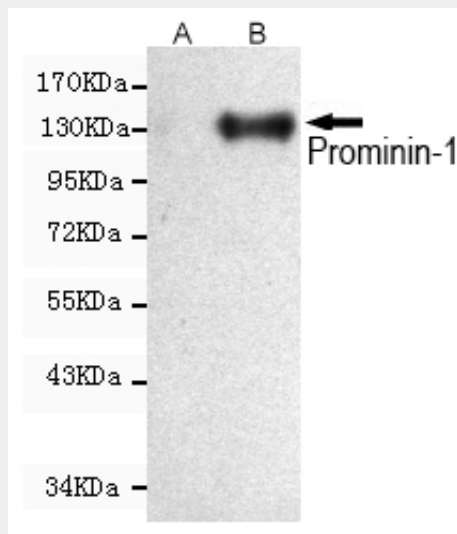
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-CD133 Monoclonal Antibody - Images



Western blot detection of Prominin-1 in CaCo2 cell lysate using Prominin-1 mouse mAb (1:1000)

diluted). Predicted band size: 97KDa. Observed band size: 133KDa



Western blot detection of Prominin-1 expression in CHO-k1 cells non-transfected (A) or transfected (B) with Prominin-1 and using Prominin-1 mouse mAb (1:1000 diluted). Predicted band size: 97KDa. Observed band size: 133KDa.

#### **Anti-CD133 Monoclonal Antibody - Background**

Binds cholesterol in cholesterol-containing plasma membrane microdomains. Proposed to play a role in apical plasma membrane organization of epithelial cells. During early retinal development acts as a key regulator of disk morphogenesis. Involved in regulati