

# Anti-CD133 Monoclonal Antibody

Mouse Anti Human Monoclonal Antibody Catalog # AP53414

## **Product Information**

Application	WB
Primary Accession	<u>043490</u>
Other Accession	<u>NM_006017</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Immunogen	Purified recombinant human Prominin-1 protein fragments expressed in E.coli.
Purification Calculated MW	Affinity purified 97202

# **Additional Information**

Gene ID	8842
Other Names	Prominin-1;Antigen AC133;Prominin-like protein 1;CD133.
Dilution	WB~~1:3000
Format	Purified mouse monoclonal antibody in PBS(Ph 7.4) containing with 0.09% (W/V) sodium azide,0.1mg/mlBSA and 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

# **Protein Information**

Name Synonyms	PROM1 PROML1
Function	May play a role in cell differentiation, proliferation and apoptosis (PubMed: <u>24556617</u> ). 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: <u>20818439</u> ).
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)

### 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

#### Images



Western blot detection of Prominin-1 in CaCo2 cell lysate using Prominin-1 mouse mAb (1:3000 diluted).Predicted band size:133KDa.Observed band size:133KDa

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