

# Anti-CD133 Monoclonal Antibody

Mouse Anti Human Monoclonal Antibody Catalog # AP53413

#### **Product Information**

Application WB
Primary Accession O43490
Other Accession NM\_006017
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 97202

## **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 -20 °C.Stable for 12 months from date of receipt

### **Protein Information**

Name PROM1

Synonyms PROML1

**Function** May play a role in cell differentiation, proliferation and apoptosis

(PubMed: 24556617). 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: 20818439).

**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

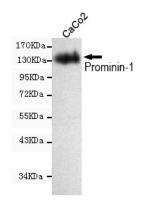
#### **Tissue Location**

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)

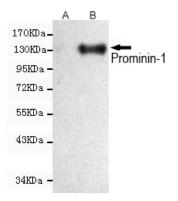
# **Background**

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 (1:1000 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.