10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Protein Information

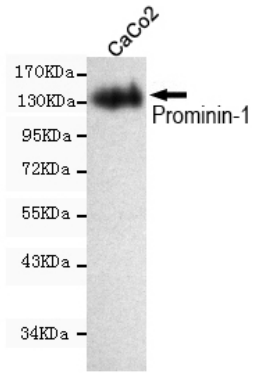
Name	PROM1
Synonyms	PROML1
Function	May play a role in cell differentiation, proliferation and apoptosis (PubMed:24556617). Binds cholesterol in cholesterol- containing plasma membrane microdomains and may play a role in the organization of the apical plasma membrane in epithelial cells. During early 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)

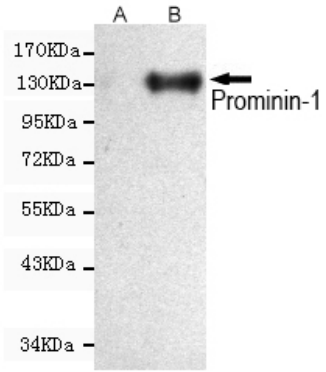
Background

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'.