

Anti-CD133 Monoclonal Antibody

Mouse Anti Human Monoclonal Antibody Catalog # AP53413

Specification

Anti-CD133 Monoclonal Antibody - 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 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 -20 °C. Stable for 12 months from date of receipt

Anti-CD133 Monoclonal Antibody - 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

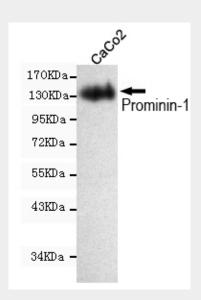
Isoform 1 is selectively expressed on CD34 hematopoietic stem and progenitor cells in adult and fetal bone marrow, fetal liver, cord blood and adult peripheral blood. Isoform 1 is not detected on other blood cells. Isoform 1 is also expressed in a number of non-lymphoid tissues including retina, pancreas, 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)

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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

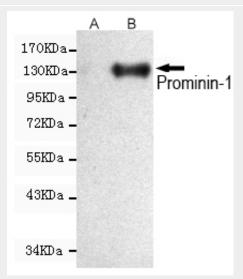
Anti-CD133 Monoclonal Antibody - Images



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