CD133 (ANT0042R) Rabbit mAb

CatalogNo: ANT8080 Recombinant

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species	Reactivity	Applications
• Rabbit	• Human,	• WB,IHC,IF,IP,ELISA

MW	Isotype
• 97kD (Calculated) 133kD (Observed)	• IgG,Kappa

Recommended Dilution Ratios

IHC 1:20-100
WB 1:1000-5000
IF 1:200-1000
ELISA 1:5000-20000
IP 1:50-200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality	Monoclonal
Clone Number	ANT0042R

Immunogen Information Specificity

Endogenous

Target Information

Gene name PROM1

Protein Name Prominin-1

Organism	Gene ID	UniProt ID
Human	8842;	O43490;
Mouse		O54990;

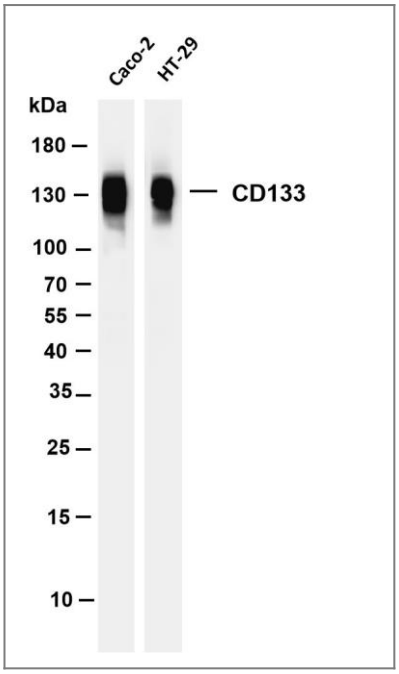
Cellular Localization Membranous

Tissue specificity 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).

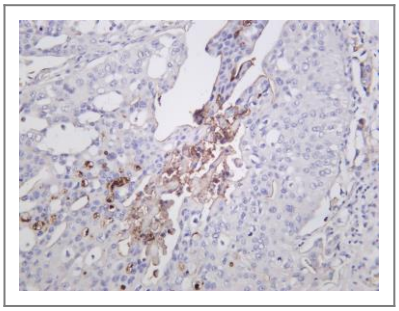
Function	Disease:Defects in PROM1 are the cause of cone-rod dystrophy type 12 (CORD12) [MIM:612657]. CORD12 is an inherited retinal dystrophy characterized by retinal pigment deposits visible on fundus examination, predominantly in the macular region, and initial loss of cone photoreceptors followed by rod degeneration. This leads to decreased visual acuity and sensitivity in the central visual field, followed by loss of peripheral vision. Severe loss of vision occurs earlier than in retinitis pigmentosa.,Disease:Defects in PROM1 are the cause of retinal macular dystrophy type 2 (MCDR2) [MIM:608051]. MCDR2 is a bull's-eye macular dystrophy characterized by bilateral annular atrophy of retinal pigment epithelium at the macula.,Disease:Defects in PROM1 are the cause of retinitis pigmentosa type 41 (RP41) [MIM:612095]; also known as retinal degeneration autosomal recessive prominin-related. RP is a retinal dystrophy belonging to the group of pigmentary retinopathies. RP is characterized by retinal pigment deposits visible on fundus examination and primary loss of rod photoreceptor cells followed by secondary loss of cone photoreceptors. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.,Disease:Defects in PROM1 are the cause of Stargardt disease type 4 (STGD4) [MIM:603786]. Stargardt disease is the most common hereditary macular degeneration. It is characterized by decreased central vision, atrophy of the macula and underlying retinal pigment epithelium, and frequent presence of prominent flecks in the posterior pole of the retina.,online information:Retina International's Scientific Newsletter,ANTM:Glycosylated.,similarity:Belongs to the prominin family.,subunit:Interacts with PCDH21 and with actin filaments.,tissue specificity:Selectively expressed on CD34 hematopoietic stem and progenitor cells in adult and fetal bone marrow, fetal liver, cord blood and adult peripheral blood. Not detected on other blood cells. 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.,

Validation

Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CD133 (ANT0042R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Caco-2 Lane 2: HT-29 Predicted band size: 97kDa Observed band size: 133kDa



Human bladder carcinoma was stained with Anti-CD133 (ANT0042R) rabbit antibody