



# CD133 Rabbit mAb

<b>Catalog No</b>	YP-rAb-18084
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	WB,IHC,IF,ELISA
<b>Gene Name</b>	PROM1
<b>Protein Name</b>	Prominin-1
<b>Purification Process</b>	Protein A
<b>Specificity</b>	Endogenous
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	IHC 1:20-100; WB 1:1000-5000; IF 1:200-1000; ELISA 1:5000-20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	PROM1 ; Prominin-1 ; Antigen AC133 ; Prominin-like protein 1 ; CD133
<b>Observed Band</b>	133kD
<b>Calculated Molecular Weight</b>	97kD
<b>Cell Pathway</b>	Membranous
<b>Tissue Specificity</b>	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).
<b>Function</b>	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, PTM: 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.

**Background**

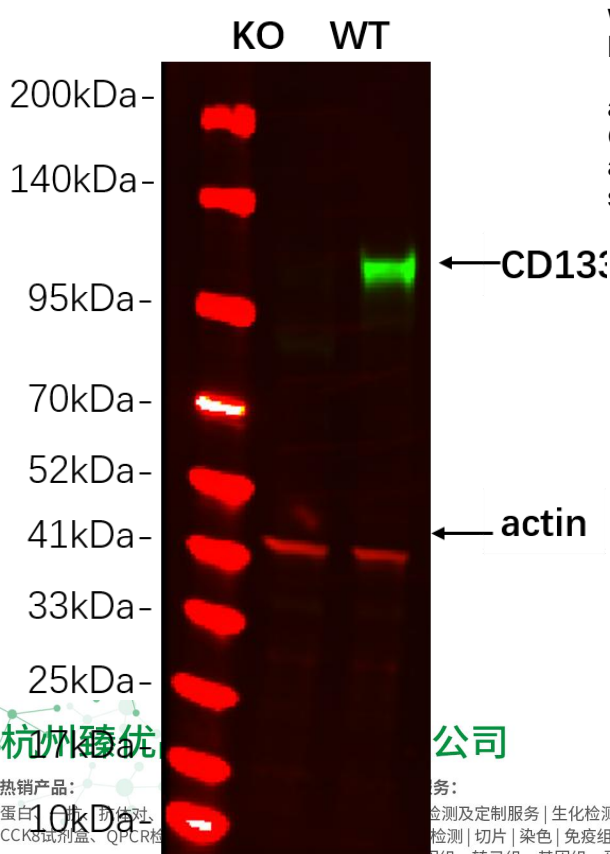
This gene encodes a pentaspan transmembrane glycoprotein. The protein localizes to membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. Mutations in this gene have been shown to result in retinitis pigmentosa and Stargardt disease. Expression of this gene is also associated with several types of cancer. This gene is expressed from at least five alternative promoters that are expressed in a tissue-dependent manner. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Western blot analysis of lysates from HAP1 WT and knockout cell, (Green) primary antibody was diluted at 1:5000, 4° over night, Dylight 800 secondary antibody was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(5B7) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody was diluted at 1:10000, 37° 1hour.

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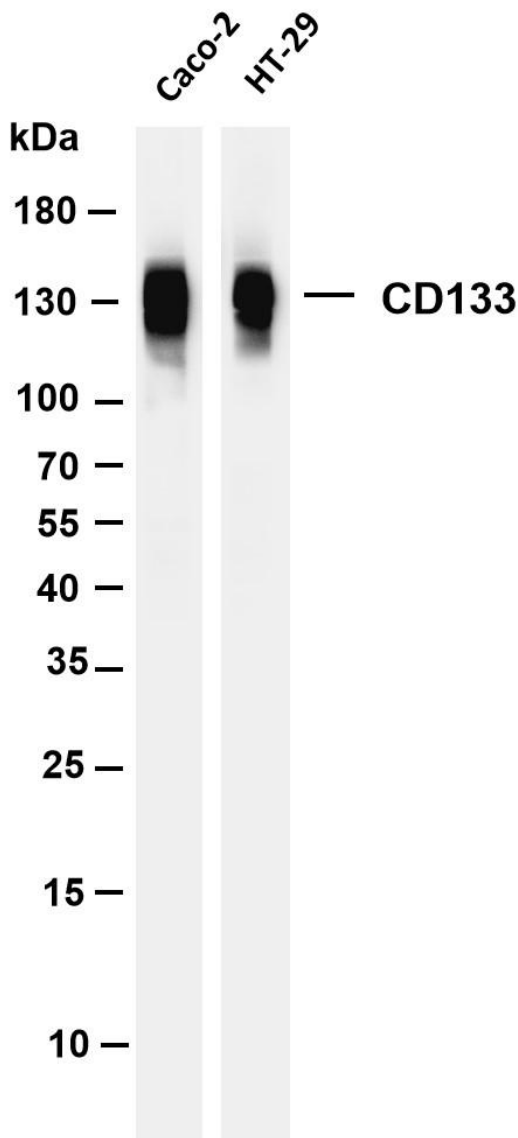
检测及定制服务 | 生化检测 | PCR、QPCR检测 | WB检测 | 切片 | 染色 | 免疫组化 | 免疫荧光 | 透射电镜全套 | 宏基因组、转录组、基因组、蛋白组、代谢组测序



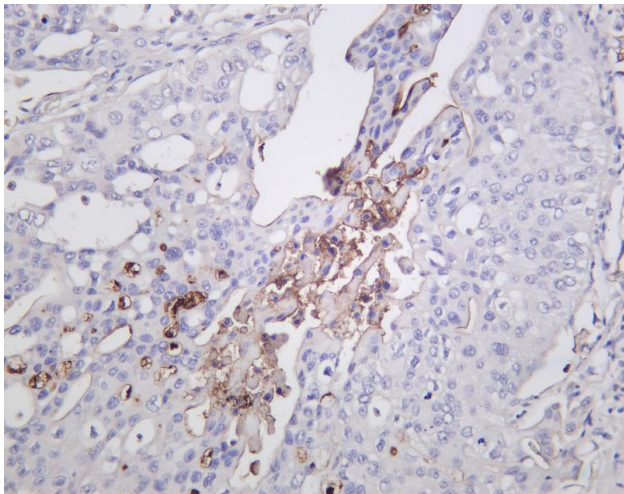
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Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CD133 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Caco-2 Lane 2: HT-29 Predicted band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



Human bladder carcinoma was stained with Anti-CD133 rabbit antibody

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蛋白、一抗、抗体对、ELISA试剂盒、生化试剂盒  
CCK8试剂盒、QPCR检测试剂盒

### 检测服务:

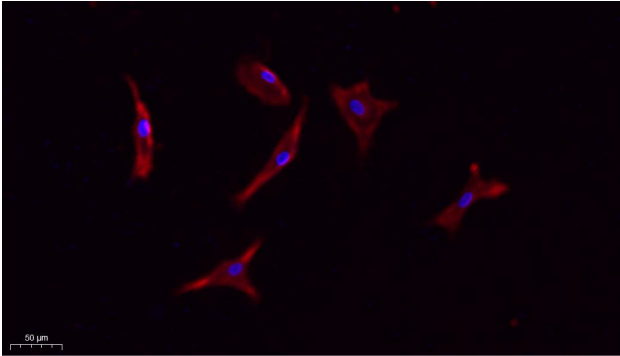
ELISA检测及定制服务 | 生化检测 | PCR、QPCR检测 | WB检测  
ICO-IP检测 | 切片 | 染色 | 免疫组化 | 免疫荧光 | 透射电镜全套  
| 宏基因组、转录组、基因组、蛋白组、代谢组测序



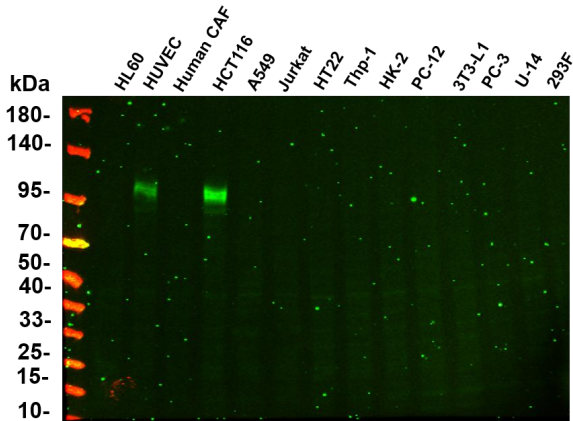
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Immunofluorescence analysis of A549. 1, primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, DAPI(blue) 10min.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:2500 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody(Cat:RS23920) was used to detect the antibody. Lane1: HL60 - Human promyelocytic leukemia cell Lane2: HUVEC - Human umbilical vein endothelial cell Lane3: Human CAF - Human cancer-associated fibroblast Lane4: HCT116 - Human colorectal carcinoma Lane5: A549 - Human lung carcinoma Lane6: Jurkat - Human T lymphocyte leukemia Lane7: HT22 - Mouse hippocampal neuronal Lane8: Thp-1 - Human monocytic leukemia Lane9: HK-2 - Human proximal tubular epithelial Lane10: PC-12 - Rat adrenal pheochromocytoma Lane11: 3T3-L1 - Mouse embryonic fibroblast Lane12: PC-3 - Human prostate adenocarcinoma Lane13: U-14 - Mouse cervical carcinoma Lane14: 293F - HEK293 derivative, adapted for suspension culture Predicted band size: 97kDa Observed band size: 133kDa

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