

CD133 (PT0142R) PT® Rabbit mAb

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| Catalog No : | YM8080 |
| Reactivity : | Human; |
| Applications : | WB;IHC;IF;IP;ELISA |
| Target : | CD133 |
| Fields : | >>Transcriptional misregulation in cancer |
| Gene Name : | PROM1 |
| Protein Name : | Prominin-1 |
| Human Gene Id : | 8842 |
| Human Swiss Prot No : | O43490 |
| Mouse Swiss Prot No : | O54990 |
| Specificity : | endogenous |
| Formulation : | PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA |
| Source : | Monoclonal, rabbit, IgG, Kappa |
| Dilution : | IHC 1:20-100,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200 |
| Purification : | Protein A |
| Storage Stability : | -15°C to -25°C/1 year(Do not lower than -25°C) |
| Molecularweight : | 97kD |
| Observed Band : | 133kD |

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],

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

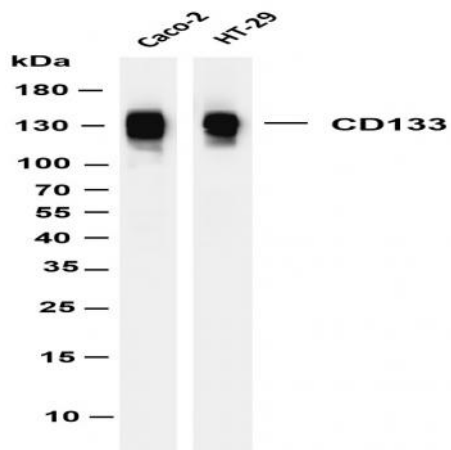
Subcellular Location :

Membranous

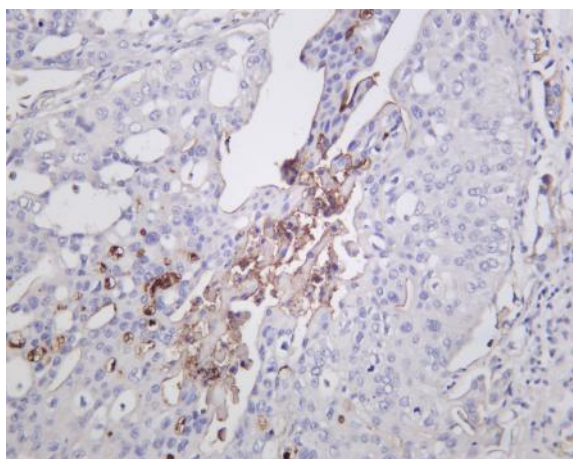
Expression :

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

Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CD133 (PT0142R) 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 (PT0142R) rabbit antibody