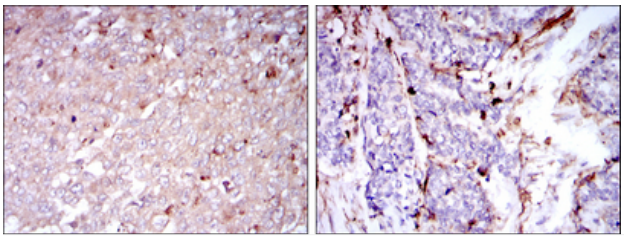
CD133 Monoclonal Antibody

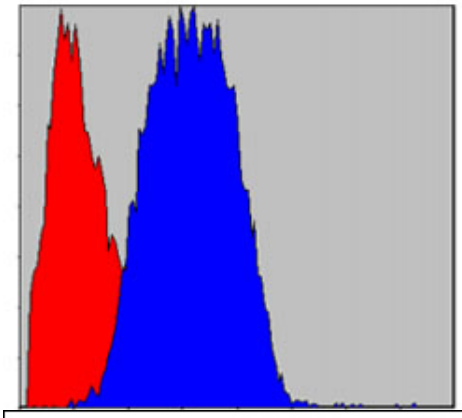
Catalog No	YP-Ab-13786
Isotype	IgG
Reactivity	Human
Applications	IHC;IF;FCM;ELISA
Gene Name	PROM1
Protein Name	Prominin-1
Immunogen	Synthesized peptide of human CD133.
Specificity	CD133 Monoclonal Antibody detects endogenous levels of CD133 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	IHC: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PROM1; Prominin-1; Antigen AC133; Prominin-like protein 1; CD antigen CD133
Observed Band	
Cell Pathway	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. Found in extracellular membrane particles in various body fluids such as cerebrospinal fluid, saliva, seminal fluid and urine.
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
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
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.

Products Images



Immunohistochemistry analysis of paraffin-embedded human breast cancer tissues (left) and human esophageal cancer tissues (right) with DAB staining using CD133 Monoclonal Antibody.



Flow cytometric analysis of Hela cells using CD133 Monoclonal Antibody (blue) and negative control (red).