

## ARG42352 anti-Prominin 1 antibody [W6B3C1] (APC)

Package: 50 tests

Store at: 4°C

### Summary

Product Description	APC-conjugated Mouse Monoclonal antibody [W6B3C1] recognizes Prominin 1
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The mouse monoclonal antibody W6B3C1 recognizes the extracellular glycosylated epitope 1 on human CD133 (CD133/1), a 120 kDa glycoprotein of prominin family, expressed e.g. on progenitor cells. This antibody is important for identification of stem cells and tumor cells.
Host	Mouse
Clonality	Monoclonal
Clone	W6B3C1
Isotype	IgG1
Target Name	Prominin 1
Species	Human
Immunogen	WERI-RB-1 retinoblastoma cell line.
Conjugation	APC
Alternate Names	CORD12; CD133; RP41; Antigen AC133; MCDR2; CD antigen CD133; PROML1; AC133; Prominin-like protein 1; Prominin-1; MSTP061; STGD4

### Application Instructions

Application table	Application	Dilution
	FACS	10 µl / 100 µl of whole blood or 10 <sup>6</sup> cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

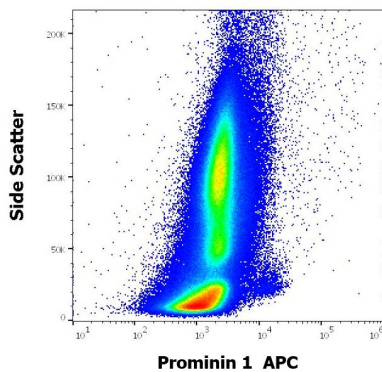
### Properties

Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

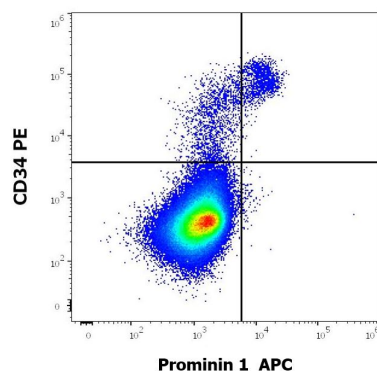
Gene Symbol	PROM1
Gene Full Name	prominin 1
Background	This gene encodes a pentaspan transmembrane glycoprotein. The protein localizes to membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. 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	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). [UniProt]
Calculated Mw	97 kDa
PTM	Isoform 1 and isoform 2 are glycosylated.  Acetylation at Lys-225, Lys-257 and Lys-264 by NAT8 and NAT8B may control PROM1 protein expression and its function in cell apoptosis. [UniProt]
Cellular Localization	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. [UniProt]

## Images



ARG42352 anti-Prominin 1 antibody [W6B3C1] (APC) FACS image

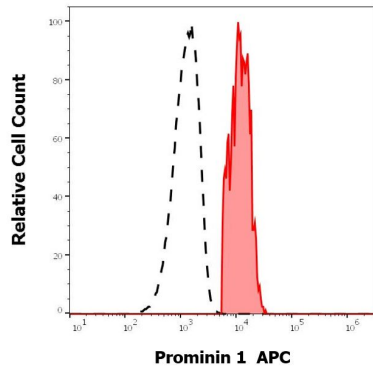
Flow Cytometry: Human bone marrow cells stained with ARG42352 anti-Prominin 1 antibody [W6B3C1] (APC) at 10  $\mu$ l /  $10^6$  cells in 100  $\mu$ l of cell suspension.



ARG42352 anti-Prominin 1 antibody [W6B3C1] (APC) FACS image

Flow Cytometry: Human bone marrow cells stained with ARG42352 anti-Prominin 1 antibody [W6B3C1] (APC) at 10  $\mu$ l /  $10^6$  cells in 100  $\mu$ l of cell suspension and [ARG55401](#) anti-CD34 antibody [581] (PE) at 20  $\mu$ l /  $10^6$  cells in 100  $\mu$ l of cell suspension.

ARG42352 anti-Prominin 1 antibody [W6B3C1] (APC) FACS image



Flow Cytometry: Separation of Human CD133 positive CD34 positive stem cells (red-filled) from CD133 negative CD34 negative cells (black-dashed). Human bone marrow cells stained with ARG42352 anti-Prominin 1 antibody [W6B3C1] (APC) at 10  $\mu$ l / 10<sup>6</sup> cells in 100  $\mu$ l of cell suspension.