

## CD133 / Prominin (Cancer Stem Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone PROM/6316]

| Catalog No      | Format                                        | Size   |
|-----------------|-----------------------------------------------|--------|
| 8842-MSM2-P0    | Purified Ab with BSA and Azide at 200ug/ml    | 20 ug  |
| 8842-MSM2-P1    | Purified Ab with BSA and Azide at 200ug/ml    | 100 ug |
| 8842-MSM2-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

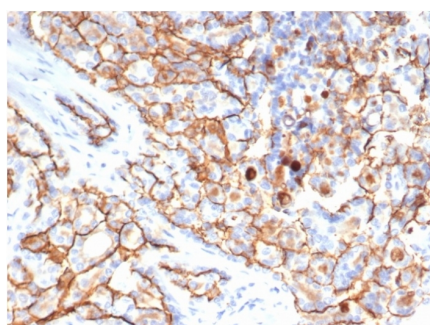
| Applications               | Tested Dillution    | Note                                                                                                                                                                              |
|----------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flow Cytometry (Flow)      | 1-2ug/million cells |                                                                                                                                                                                   |
| Immunofluorescence (IF)    | 1-3ug/ml            |                                                                                                                                                                                   |
| Immunohistochemistry (IHC) | 1-2ug/ml            | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB)          | 2-4ug/ml            |                                                                                                                                                                                   |

### Product Details

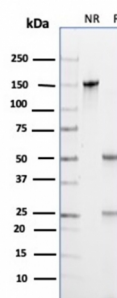
|                               |                                                                                                                                                                               |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clone</b>                  | PROM/6316                                                                                                                                                                     |
| <b>Gene Name</b>              | PROM1                                                                                                                                                                         |
| <b>Immunogen</b>              | Recombinant chimericPROM1 protein (around aa180-380 and aa612-765). This Mab recognizes both glycosylated and non-glycosylated extracellular domains of CD133.                |
| <b>Host</b>                   | Mouse                                                                                                                                                                         |
| <b>Clonality</b>              | Monoclonal                                                                                                                                                                    |
| <b>Isotype / Light Chain</b>  | IgG1                                                                                                                                                                          |
| <b>Mol. Weight of Antigen</b> | 97kDa. Depending upon glycosylation the apparent molecular weight on western blots will increase to ~ 120 kDa.                                                                |
| <b>Cellular Localization</b>  | Apical cell membrane, Cell projection, Cilium, Endoplasmic reticulum, Endoplasmic reticulum-Golgi intermediate compartment, Microvillus membrane, Photoreceptor outer segment |
| <b>Species Reactivity</b>     | Human                                                                                                                                                                         |
| <b>Positive Control</b>       | HeLa or SW480 cells. Human tonsil., Raji                                                                                                                                      |

\*Optimal dilution for a specific application should be determined.

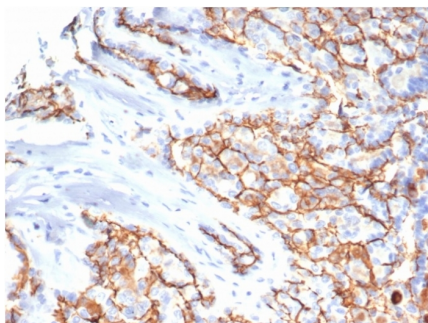
### Product Images for CD133 / Prominin (Cancer Stem Cell Marker) Antibody



Formalin-fixed, paraffin-embedded human papillary renal cell carcinoma stained with CD133 / Prominin Mouse Monoclonal Antibody (PROM/6316).



SDS-PAGE Analysis of Purified CD133 Mouse Monoclonal Antibody (PROM/6316). Confirmation of Integrity and Purity of Antibody.



Formalin-fixed, paraffin-embedded human papillary renal cell carcinoma stained with CD133 / Prolimin Mouse Monoclonal Antibody (PROM/6316).

### Specificity & Comments

CD133, also known as PROML1 or Prolimin, is a stem cell antigen that may be useful for the selection and expansion of hematopoietic cells and may be used as a positive marker for the characterization of trophoblast cell lines. The human CD133 gene maps to chromosome 4p15.32 and encodes an 865 amino acid protein. The CD133 gene codes for a pentaspantransmembrane glycoprotein that is expressed on primitive hematopoietic stem, progenitor, retinoblastoma, hemangioblasts and neural stem cells and developing epithelium. The 5-TM structure includes an extracellular N-terminus, two short intra- cellular loops, two large extracellular loops and an intracellular C-terminus. CD133 is a candidate gene for retinal proteins that are targeted to plasma membrane protrusions. These retinal proteins, including CD133, may influence the shedding of photoreceptive membranes from the terminal end of the outer segments of vertebrate photoreceptors, where they are phagocytosed by the retinal pigment epithelium, and represent candidates for inherited retinal degenerations.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Neural Stem Cells, Stem Cell Differentiation