CD133 / Prominin (Cancer Stem Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone PROM/1510]

Catalog No	Format	Size
8842-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
8842-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
8842-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

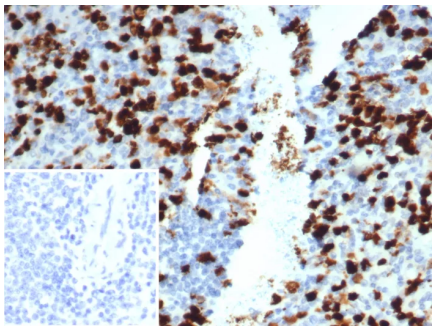
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	PROM/1510
Gene Name	PROM1
Immunogen	Recombinant chimeric PROM1 protein (around aa180-380 and aa612-765). This Mab recognizes both glycosylated and non-glycosylated extracellular domains of CD133.
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2 / Kappa
Mol. Weight of Antigen	97kDa. Depending upon glycosylation|the apparent molecular weight on western blots will increase to ~ 120 kDa.
Cellular Localization	Cell membrane, Cell projection, Cilium, Endoplasmic reticulum
Species Reactivity	Human
Positive Control	Human tonsil.

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

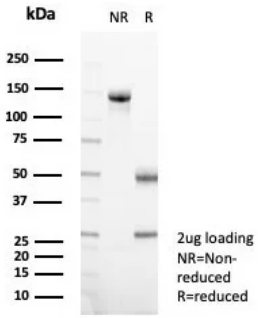
Product Images for CD133 / Prominin (Cancer Stem Cell Marker) Antibody



Formalin-fixed, paraffin-embedded human spleen stained with CD133 / Prominin Mouse Monoclonal Antibody (PROM/1510). Inset: PBS instead of primary antibody; secondary only negative control.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing CD133 / Prominin Mouse Monoclonal Antibody (PROM/1510). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



SDS-PAGE Analysis Purified CD133 / Prominin Mouse Monoclonal Antibody (PROM/1510). Confirmation of Purity and Integrity of Antibody.

Specificity & Comments

CD133, also known as PROML1 or Prominin, 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 pentaspan transmembrane 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.

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

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.