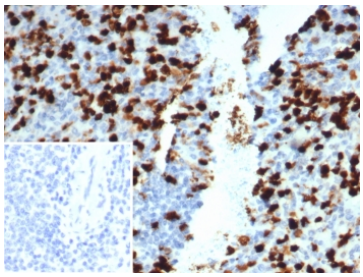
Prominin-1 Antibody / PROM1 / CD133 [clone PROM/1510] (V5042)

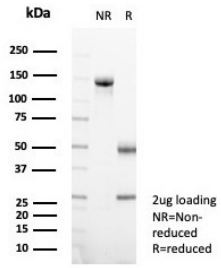
Catalog No.	Formulation	Size
V5042-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5042-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5042SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

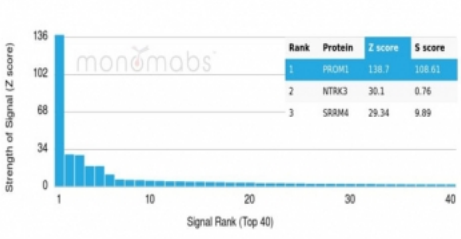
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	PROM/1510
Purity	Protein A/G affinity
UniProt	O43490
Localization	Cytoplasm (ER)
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Prominin-1 antibody is available for research use only.



IHC staining of FFPE human spleen tissue with Prominin-1 antibody (clone PROM/1510). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Prominin-1 antibody (clone PROM/1510) as confirmation of integrity and purity.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Prominin-1 antibody (clone PROM/1510). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) 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 HuProt(TM) 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.

Description

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 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.

Application Notes

Optimal dilution of the Prominin-1 antibody should be determined by the researcher.

Immunogen

Recombinant chimeric protein (sequences within amino acids 180-380 and 612-765) was used as the immunogen for the Prominin-1 antibody. This Prominin-1 antibody binds both glycosylated and non-glycosylated extracellular domains of Prominin-1.

Storage

Aliquot the Prominin-1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.