

Rabbit anti-Human AC133 (CD133) Polyclonal Antibody | anti-PROM1 antibody

AC133 (CD133) Antibody (C-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA289801	Rabbit	Human	Western Blot, Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA, Immunofluorescence

PRODUCT SYNONYMS

AC133 (CD133); Polyclonal Antibody; AC133 (CD133) Antibody (C-term); Prominin-1; Antigen AC133; Prominin-like protein 1; CD133; PROM1; PROML1; anti-PROM1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This AC133 (CD133) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the C-terminal region of human AC133.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Length	842
Applicable Applications for anti-PROM1 antibody	WB (Western Blot), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA, IF (Immunofluorescence)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



FCM/FACS (Flow Cytometry)

Flow cytometric analysis of CEM cells using AC133 (CD133) Antibody (C-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



IF (Immunofluorescence)

Immunofluorescence analysis of anti-AC133 (CD133) Antibody (C-term) in HeLa cells. 0.025 mg/ml primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.



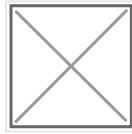
IHC (Immunohistochemistry)

Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with AC133 (CD133) antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



IF (Immunofluorescence)

Immunofluorescence data is of Bone Marrow Mononuclear Cells stained with polyclonal CD133. Image courtesy of Rick Cohen from the Coriell Institute for Medical Research (NJ, USA).



WB (Western Blot)

The anti-AC133 Pab is used in Western blot to detect AC133 in Y79 cell lysate. Due to protein glycosylation, the target band is around 120kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PROM1 antibody

The CD133 gene codes for a pentaspan transmembrane glycoprotein. The CD133 antigen appears to belong to a new molecular family of 5-TM proteins, as the characterization of the CD133 antigen and prominin in the mouse were the first descriptions of a 5-TM glycoprotein structure. This 'family' includes members from several different species (which may be homologs) including human, mouse, rat, fly, and worm. The 5-TM structure includes an extracellular N-terminus, two short intracellular loops, two large extracellular loops and an intracellular C-terminus. CD133 was initially shown to be expressed on primitive hematopoietic stem and progenitor cells and retinoblastoma. CD133 has since been shown to be expressed on hemangioblasts, and neural stem cells as well as on developing epithelium. Expression patterns for CD133 generally mimic those of the murine prominin molecule, although CD133 antigen has not yet been demonstrated on adult epithelial tissue. The CD133 positive fraction of human bone marrow, cord blood and peripheral blood have been shown to efficiently engraft in xenotransplantation models, and have been shown to contain the majority of the granulocyte/macrophage precursors, NOD/SCID repopulating cells and CD34 + dendritic cell precursors. Phenotypically, CD133 positive cells in blood and marrow are CD34 bright, with CD34 dim CD71 bright cells being negative for CD133 expression. Many leukemias express CD133 as well as CD34, but some investigators have noted leukemic blasts which are CD133+ and CD34 negative. No natural ligand has yet been demonstrated for the CD133 molecule, and its function in hematopoietic tissue is unknown.

References

Giebel, B., et al., Blood 104(8):2332-2338 (2004). Torrente, Y., et al., J. Clin. Invest. 114(2):182-195 (2004). Shmelkov, S.V., et al., Blood 103(6):2055-2061 (2004). Yu, Y., et al., J. Biol. Chem. 277(23):20711-20716 (2002). Corbeil, D., et al., Biochem. Biophys. Res. Commun. 285(4):939-944 (2001).

NCBI AND UNIPROT INFORMATION

NCBI GI #	224994189
NCBI GeneID	8842
NCBI Accession #	NP_001139319.1; NP_001139320.1; NP_001139321.1; NP_001139322.1; NP_001139323.1; NP_001139324.1; NP_006008.1
NCBI GenBank Nucleotide #	NM_001145847.1
UniProt Accession #	O43490; Q6SV49; Q6SV50; Q6SV51; Q6SV52; Q6SV53; Q96EN6
Molecular Weight	97202
NCBI Official Full Name	prominin-1 isoform 2
NCBI Official Synonym Full Names	prominin 1
NCBI Official Symbol	PROM1
NCBI Official Synonym Symbols	RP41; AC133; CD133; MCDR2; STGD4; CORD12; PROML1; MSTP061

NCBI Protein Information	prominin-1
UniProt Protein Name	Prominin-1
UniProt Gene Name	PROM1
UniProt Synonym Gene Names	PROML1
UniProt Entry Name	PROM1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/ac133-cd133-antibody-western-blot-flow-cytometry-immunohistochemistry-immunofluorescence-elisa/289801>