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AC133 (CD133) Antibody Blocking Peptide

Synthetic peptide
Catalog # BP1130a

Specification

AC133 (CD133) Antibody Blocking Peptide - Product Information

Other Accession	Q9Z239

AC133 (CD133) Antibody Blocking Peptide - Additional Information

Target/Specificity
The synthetic peptide sequence used to generate the antibody AM1130a was selected from the CD133 region of human AC133 (CD133). A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AC133 (CD133) Antibody Blocking Peptide - Protein Information

AC133 (CD133) Antibody Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

AC133 (CD133) Antibody Blocking Peptide - Images

AC133 (CD133) Antibody Blocking Peptide - Background

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.

AC133 (CD133) Antibody Blocking Peptide - 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).