

PROM1 Blocking Peptide (Center) Synthetic peptide Catalog # BP21276c

# Specification

# **PROM1 Blocking Peptide (Center) - Product Information**

Primary Accession

<u>043490</u>

# **PROM1 Blocking Peptide (Center) - Additional Information**

Gene ID 8842

**Other Names** Prominin-1, Antigen AC133, Prominin-like protein 1, CD133, PROM1, PROML1

## **Target/Specificity**

The synthetic peptide sequence is selected from aa 361-375 of HUMAN PROM1

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.

## **PROM1** Blocking Peptide (Center) - Protein Information

Name PROM1

#### Synonyms PROML1

#### Function

May play a role in cell differentiation, proliferation and apoptosis (PubMed:<a href="http://www.uniprot.org/citations/24556617" target="\_blank">24556617</a>). Binds cholesterol in cholesterol- containing plasma membrane microdomains and may play a role in the organization of the apical plasma membrane in epithelial cells. During early retinal development acts as a key regulator of disk morphogenesis. Involved in regulation of MAPK and Akt signaling pathways. In neuroblastoma cells suppresses cell differentiation such as neurite outgrowth in a RET-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/20818439" target="\_blank">20818439</a>).

#### **Cellular Location**

Apical cell membrane; Multi-pass membrane protein. Cell projection, microvillus membrane; Multi-pass membrane protein. Cell projection, cilium, photoreceptor outer segment Endoplasmic reticulum. Endoplasmic reticulum-Golgi intermediate compartment. Note=Found in extracellular



membrane particles in various body fluids such as cerebrospinal fluid, saliva, seminal fluid and urine

## **Tissue Location**

Isoform 1 is selectively expressed on CD34 hematopoietic stem and progenitor cells in adult and fetal bone marrow, fetal liver, cord blood and adult peripheral blood. Isoform 1 is not detected on other blood cells. Isoform 1 is also expressed in a number of non-lymphoid tissues including retina, pancreas, placenta, kidney, liver, lung, brain and heart. Found in saliva within small membrane particles. Isoform 2 is predominantly expressed in fetal liver, skeletal muscle, kidney, and heart as well as adult pancreas, kidney, liver, lung, and placenta. Isoform 2 is highly expressed in fetal liver, low in bone marrow, and barely detectable in peripheral blood Isoform 2 is expressed on hematopoietic stem cells and in epidermal basal cells (at protein level). Expressed in adult retina by rod and cone photoreceptor cells (at protein level)

# **PROM1 Blocking Peptide (Center) - Protocols**

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

## <u>Blocking Peptides</u>

# PROM1 Blocking Peptide (Center) - Images

# PROM1 Blocking Peptide (Center) - Background

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## **PROM1 Blocking Peptide (Center) - References**

Miraglia S., et al.Blood 90:5013-5021(1997). Yu Y., et al.J. Biol. Chem. 277:20711-20716(2002). Lin J., et al.Submitted (OCT-2003) to the EMBL/GenBank/DDBJ databases. Wang X.Y., et al.Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases. Ota T., et al.Nat. Genet. 36:40-45(2004).