

Glypican-1 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP9163a

Specification

Glypican-1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P35052</u>

Glypican-1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 2817

Other Names Glypican-1, Secreted glypican-1, GPC1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9163a was selected from the N-term region of human Glypican-1. 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.

Glypican-1 Antibody (N-term) Blocking Peptide - Protein Information

Name GPC1

Function

Cell surface proteoglycan that bears heparan sulfate. Binds, via the heparan sulfate side chains, alpha-4 (V) collagen and participates in Schwann cell myelination (By similarity). May act as a catalyst in increasing the rate of conversion of prion protein PRPN(C) to PRNP(Sc) via associating (via the heparan sulfate side chains) with both forms of PRPN, targeting them to lipid rafts and facilitating their interaction. Required for proper skeletal muscle differentiation by sequestering FGF2 in lipid rafts preventing its binding to receptors (FGFRs) and inhibiting the FGF-mediated signaling.

Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor; Extracellular side. Endosome. Note=S-nitrosylated form recycled in endosomes. Localizes to CAV1-containing vesicles close to the cell surface. Cleavage of heparan sulfate side chains takes place mainly in late endosomes. Associates with both forms of



PRNP in lipid rafts Colocalizes with APP in perinuclear compartments and with CP in intracellular compartments. Associates with fibrillar APP amyloid-beta peptides in lipid rafts in Alzheimer disease brains

Glypican-1 Antibody (N-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

Glypican-1 Antibody (N-term) Blocking Peptide - Images

Glypican-1 Antibody (N-term) Blocking Peptide - Background

GPC1(Glypican 1) is a cell surface proteoglycan that contains heparan sulphate. The protein is attached to the cell membrane by a GPI anchor. GPC1 is required for efficient TGF-beta1 signalling in pancreatic cancer cells. Members of the glypican-related integral membrane proteoglycan family (GRIPS) may play a role in the control of cell division and growth regulation.

Glypican-1 Antibody (N-term) Blocking Peptide - References

Sjoeblom T., et.al., Science 314:268-274(2006).