

**Glypican-1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9163A****Specification**

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**Glypican-1 Antibody (N-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P35052</a>
Other Accession	<a href="#">Q9QZF2</a> , <a href="#">G3X745</a>
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	6-31

**Glypican-1 Antibody (N-term) - Additional Information****Gene ID** 2817**Other Names**

Glypican-1, Secreted glypican-1, GPC1

**Target/Specificity**

This Glypican-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 6-31 amino acids from the N-terminal region of human Glypican-1.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**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.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Glypican-1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**Glypican-1 Antibody (N-term) - 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

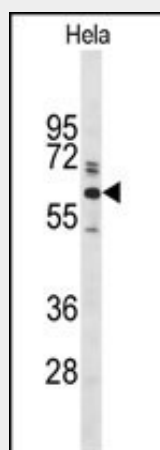
Cell membrane; Lipid-anchor, GPI-anchor; Extracellular side. Endosome. Note=S-nitrosylated form recycled in endosomes. Localizes to CAV1-containing vesicles close to the cell surface. Cleavage of heparan sulfate side chains takes place mainly in late endosomes. Associates with both forms of PRNP in lipid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

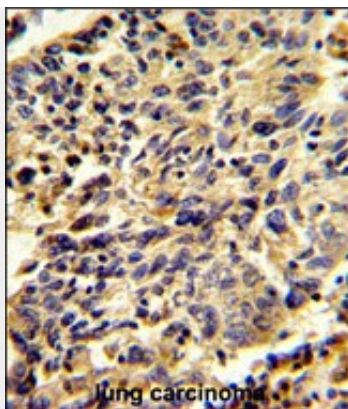
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

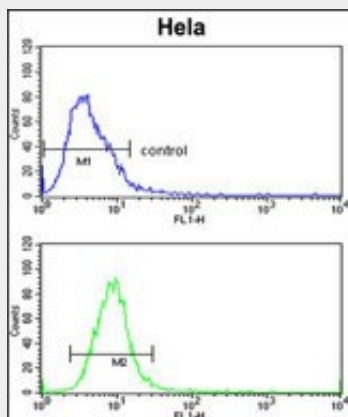
#### Glypican-1 Antibody (N-term) - Images



Western blot analysis of Glypican-1 Antibody (N-term) (Cat. #AP9163a) in HeLa cell line lysates (35ug/lane). Glypican-1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with Glypican-1 Antibody (N-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.



Glypican-1 Antibody (N-term) (Cat. #AP9163a) flow cytometric analysis of HeLa cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **Glypican-1 Antibody (N-term) - 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) - References**

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