

Glypican-1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9163A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P35052
Other Accession	Q9QZF2 , G3X745
Reactivity	Human
Predicted	Mouse, Bovine, Rat, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18215
Calculated MW	61680
Antigen Region	6-31

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~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

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

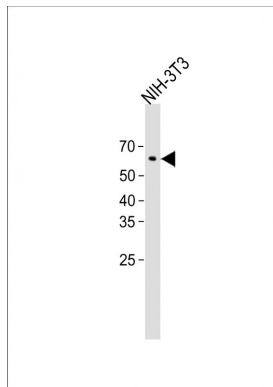
Background

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.

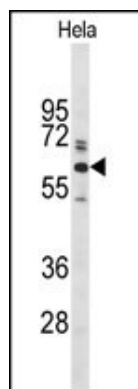
References

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

Images

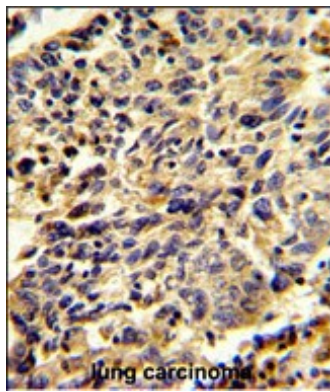


All lanes: Anti-Glypican-1 Antibody (N-term) at 1:1000 dilution + NIH-3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 61 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

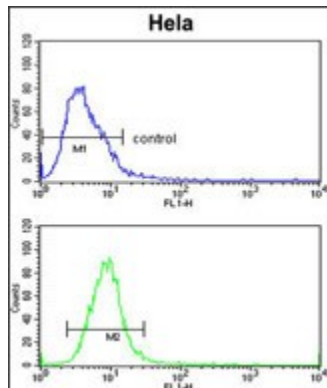


Western blot analysis of Glypican-1 Antibody (N-term) (Cat. #AP9163a) in HeLa cell line lysates (35ug/lane). Glypican-1 (arrow) was detected using the purified Pab.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.