

Datasheet for ABIN349638
anti-GPC1 antibody (Internal Region)[Go to Product page](#)

1 Image

Overview

Quantity:	100 µg
Target:	GPC1
Binding Specificity:	Internal Region
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GPC1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	<p>This protein A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human glypican-1 protein.</p> <p>Immunogen Type: Peptide</p>
Isotype:	IgG
Specificity:	<p>This product was protein A purified from monospecific antiserum by immunoaffinity chromatography using protein A coupled to agarose beads. This antibody is specific for human glypican-1 protein. A BLAST analysis was used to suggest partial cross-reactivity with glypican from rat, mouse, Macaque, dog, cattle, and opossum sources based on 100 - 88% homology with the immunizing sequence. Cross-reactivity with glypican from other sources has not been determined.</p>

Product Details

Cross-Reactivity: Mouse (Murine), Rat (Rattus)

Characteristics: This antibody is designed, produced, and validated as part of a collaboration with the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Glypican-1 (also known as GPC1 or FLJ38078) is a member of the glypican-related integral membrane proteoglycan family (GRIPS). This protein is a heparan sulfate proteoglycan which is composed of a membrane-associated protein core substituted with a variable number of heparan sulfate chains and are anchored to the cell surface via a covalent linkage to glycosylphosphatidylinositol (GPI). Glypicans can modify cell signaling pathways and contribute to cellular proliferation and tissue growth. In humans, glypican-1 is over expressed in breast and brain cancers (gliomas). All glypicans contain an N-terminal signal peptide and a hydrophobic domain in their C-terminal region which is required for attachment of the GPI anchor. The amino acid sequences of the six vertebrate glypican family members vary from 17% to 63% identity. The location of 14 cysteine amino acids is conserved between the glypicans, suggesting the existence of a highly similar three-dimensional structure. Heparan sulfate glycosaminoglycan chains are attached at the 50 amino acids at the C-terminal end of the protein, near the anchor and the cell membrane. Glypican functions as coreceptor for a variety of growth factors. Glypican-1 has been shown to interact with SLIT2.

Sterility: Sterile filtered

Target Details

Target: GPC1

Alternative Name: Glypican-1 ([GPC1 Products](#))

Background: Glypican-1 antibody is designed, produced, and is suitable for Cancer, Immunology and Nuclear Signaling research. Glypican-1 (also known as GPC1 or FLJ38078) is a member of the glypican-related integral membrane proteoglycan family (GRIPS). This protein is a heparan sulfate proteoglycan which is composed of a membrane-associated protein core substituted with a variable number of heparan sulfate chains and are anchored to the cell surface via a covalent linkage to glycosylphosphatidylinositol (GPI). Glypicans can modify cell signaling pathways and contribute to cellular proliferation and tissue growth. In humans, glypican-1 is over expressed in breast and brain cancers (gliomas). All glypicans contain an N-terminal signal peptide and a hydrophobic domain in their C-terminal region which is required for attachment of the GPI anchor. The amino acid sequences of the six vertebrate glypican family members vary from 17% to 63% identity. The location of 14 cysteine amino acids is conserved between the glypicans, suggesting the existence of a highly similar three-dimensional structure. Heparan

Target Details

sulfate glycosaminoglycan chains are attached at the 50 amino acids at the C-terminal end of the protein, near the anchor and the cell membrane. Glypican functions as coreceptor for a variety of growth factors. Glypican-1 has been shown to interact with SLIT2.

Synonyms: Glypican-1 Secreted glypican-1 GPC1 FLJ38078

Gene ID: 2817, 30410985

UniProt: [P35052](#)

Pathways: [Glycosaminoglycan Metabolic Process](#), [Regulation of Muscle Cell Differentiation](#)

Application Details

Application Notes: Anti-Glypican-1 protein A purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~61 kDa in size corresponding to glypican by western blotting in the appropriate cell lysate or extract. The higher molecular weight (110kDa) of transfected Fc-glypican compared with the expected MW of glypican is likely due to the presence of the Fc-tag.

Comment: Gene Name: GPC1

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 2.1 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

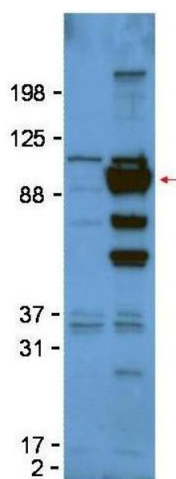
Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C/-20 °C

Storage Comment: Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is three (3) months from date of opening.

Expiry Date: 3 months



Western Blotting

Image 1. Western Blot of Rabbit anti-Glypican-1 antibody. Lane 1: untransfected 293T cell lysate. Lane 2: 293T whole cell lysate. Load: 50ug per lane. Primary antibody: Glypican-1 antibody at 1:1000 for overnight at 4°C. Secondary antibody: HRP Gt-a-Rabbit IgG diluted 1:5,000 at 4° C. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 61kDa, 61kDa for Glypican-1. Other band(s): 110kDa is likely due to the presence of the Fc-tag. Minor bands may represent post translational modifications of glypican-1.