

glypican-1 (9E9): sc-101826

BACKGROUND

Glypican-1 (GPC1), a member of the glycosylphosphatidylinositol-anchored cell surface heparan sulfate proteoglycans, is involved with cell adhesion and migration, lipoprotein metabolism, modulation of growth factor activities and anticoagulation. Glypican-1 binds to and modulates the activity of several fibroblast growth factors (FGFs), including FGF-1, FGF-2 and FGF-7. Glypican-1 acts as an extracellular chaperone for VEGF165 to help restore receptor binding ability after oxidation. The heparan sulfate chains of glypican-1 mediate specific binding of glypican-1 to VEGF165. When present on the surface of marrow stromal cells, glypican-1 may aid in the maintenance and development of hematopoietic stem and progenitor cells. Human pancreatic cancer cells express a large amount of glypican-1 when compared to glypican-1 levels in normal pancreatic cells. Glypican-1 may play an important role in the response of pancreatic cancer cells to mitogenic stimuli, such as FGF-2. The gene encoding human glypican-1 maps to chromosome 2q37.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPC1 (human) mapping to 2q37.3; Gpc1 (mouse) mapping to 1 D.

SOURCE

glypican-1 (9E9) is a mouse monoclonal antibody raised against full length glypican-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

glypican-1 (9E9) is recommended for detection of glypican-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for glypican-1 siRNA (h): sc-40638, glypican-1 siRNA (m): sc-40639, glypican-1 shRNA Plasmid (h): sc-40638-SH, glypican-1 shRNA Plasmid (m): sc-40639-SH, glypican-1 shRNA (h) Lentiviral Particles: sc-40638-V and glypican-1 shRNA (m) Lentiviral Particles: sc-40639-V.

Molecular Weight of glypican-1: 64 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, mouse brain extract: sc-2253 or LADMAC whole cell lysate: sc-364189.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.