

glypican-1 (K-17): sc-48516

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.

CHROMOSOMAL LOCATION

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

SOURCE

glypican-1 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of glypican-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48516 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

glypican-1 (K-17) 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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

glypican-1 (K-17) is also recommended for detection of glypican-1 in additional species, including canine, bovine and porcine.

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.

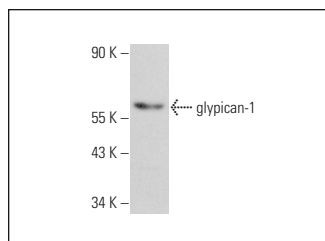
Molecular Weight of glypican-1: 64 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, LADMAC whole cell lysate: sc-364189 or RAW 264.7 whole cell lysate: sc-2211.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



glypican-1 (K-17): sc-48516. Western blot analysis of glypican-1 expression in RAW 264.7 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Dwivedi, P.P., et al. 2013. Regulation of bone morphogenetic protein signalling and cranial osteogenesis by Gpc1 and Gpc3. Bone 55: 367-376.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **glypican-1 (A-10): sc-365000** or **glypican-1 (4D1): sc-101827**, our highly recommended monoclonal alternatives to glypican-1 (K-17).