glypican-3 (1G12): sc-65443

BACKGROUND

Glypican-3 (GPC3) is an integral membrane protein that is mutated in the Simpson-Golabi-Behmel syndrome (SGBS). SGBS is characterized by pre- and post-natal overgrowth and is a recessive X-linked condition. Glypican-3, also designated OCI-5 in rat, is a member of the glypican family of heparan sulfate proteoglycans, which attach to the cell membrane via a glycosyl-phosphatidylinositol (GPI) anchor. Expression of glypican-3 is detected in embryonic mesodermal lung, liver and kidney tissues. Glypican-3 is thought to regulate tissue and organ growth through interactions with growth factors such as Insulin-like growth factor-II (IGF-II) or fibroblast growth factor-2 (FGF-2). Glypican-3 may be downregulated by various means, including promoter hypermethylation or the repression of specific transcription factors.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: GPC3 (human) mapping to Xq26.2.

SOURCE

glypican-3 (1G12) is a mouse monoclonal antibody raised against a fragment containing amino acids 511-580 of glypican-3 of human origin.

PRODUCT

Each vial contains 15 µg IgG1 in 100 µl of PBS with <0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

glypican-3 (1G12) is recommended for detection of glypican-3 of 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for glypican-3 siRNA (h): sc-40640, glypican-3 shRNA Plasmid (h): sc-40640-SH and glypican-3 shRNA (h) Lentiviral Particles: sc-40640-V.

Molecular Weight of glypican-3: 67 kDa.

Positive Controls: glypican-3 (h): 293T Lysate: sc-176285, IMR-32 cell lysate: sc-2409 or SH-SY5Y cell lysate: sc-3812.

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.

DATA

See glypican-3 (F-3): sc-390587 for glypican-3 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.

SELECT PRODUCT CITATIONS