

glypican-3 (h): 293T Lysate: sc-176285

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

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2. Song, H.H., et al. 1997. OCI-5/rat glypican-3 binds to fibroblast growth factor-2 but not to Insulin-like growth factor-2. *J. Biol. Chem.* 272: 7574-7577.
3. Li, M., et al. 1997. Expression of OCI-5/glypican 3 during intestinal morphogenesis: regulation by cell shape in intestinal epithelial cells. *Exp. Cell Res.* 235: 3-12.
4. Gonzalez, A.D., et al. 1998. OCI-5/GPC3, a glypican encoded by a gene that is mutated in the Simpson-Golabi-Behmel overgrowth syndrome, induces apoptosis in a cell line-specific manner. *J. Cell. Biol.* 141: 1407-1414.
5. Cano-Gauci, D.F., et al. 1999. Glypican-3-deficient mice exhibit developmental overgrowth and some of the abnormalities typical of Simpson-Golabi-Behmel syndrome. *J. Cell Biol.* 146: 255-264.
6. Lin, H., et al. 1999. Frequent silencing of the GPC3 gene in ovarian cancer cell lines. *Cancer Res.* 59: 807-810.
7. Murthy, S.S., et al. 2000. Expression of GPC3, an X-linked recessive overgrowth gene, is silenced in malignant mesothelioma. *Oncogene* 19: 410-416.

CHROMOSOMAL LOCATION

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

PRODUCT

glypican-3 (h): 293T Lysate represents a lysate of human glypican-3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

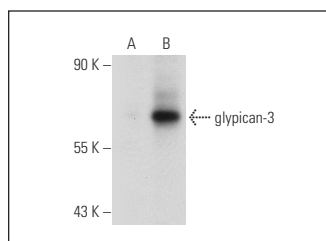
APPLICATIONS

glypican-3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive glypican-3 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

glypican-3 (1G12): sc-65443 is recommended as a positive control antibody for Western Blot analysis of enhanced human glypican-3 expression in glypican-3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



glypican-3 (1G12): sc-65443. Western blot analysis of glypican-3 expression in non-transfected: sc-117752 (A) and human glypican-3 transfected: sc-176285 (B) 293T whole cell lysates.

RESEARCH USE

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