SANTA CRUZ BIOTECHNOLOGY, INC.

# glypican-5 (h): 293T Lysate: sc-115481

## BACKGROUND

Glypicans are thought to activate or control the activity of morphogens and growth factors, thereby influencing cellular division, regulation of cell growth and differentiation. Neuronal growth and repair are also thought to be controlled by glypicans. Glypican-5 is also known as GPC5 and is a 572 amino acid protein. Glypican-5 is primarily expressed in adult brain tissue (where it is localized to neurons), but is also detected in fetal brain, lung and liver. Glypican-5 is a member of the glypican-related integral membrane proteoglycan family (GRIPS), which is characterized as having a core protein that is able to use glycosyl phosphatidylinositol to attach to the cytoplasmic membrane. Upregulation of glypican-5 has been found in active multiple sclerosis plaques, suggesting that glypican-5 may be involved in pathogenesis of multiple sclerosis. Upregulation of glypican-5 has also been recognized as having a strong correlation with lymphomas, as well as other tumors.

## REFERENCES


1. Saunders, S., et al. 1997. Expression of the cell surface proteoglycan glypican-5 is developmentally regulated in kidney, limb, and brain. Dev. Biol. 190: 78-93.
2. Veugelers, M., et al. 1997. Characterization of glypican-5 and chromosomal localization of human GPC5, a new member of the glypican gene family. Genomics 40: 24-30.
3. Paine-Saunders, S., et al. 1999. GPC6, a novel member of the glypican gene family, encodes a product structurally related to GPC4 and is co-localized with GPC5 on human chromosome 13. Genomics 57: 455-458.
4. Veugelers, M., et al. 2001. A 4-Mb BAC/PAC contig and complete genomic structure of the GPC5/GPC6 gene cluster on chromosome 13q32. Matrix Biol. 20: 375-385.
5. De Cat, B. and David, G. 2001. Developmental roles of the glypicans. Semin. Cell Dev. Biol. 12: 117-125.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602446. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Yu, W., et al. 2003. GPC5 is a possible target for the 13q31-q32 amplification detected in lymphoma cell lines. J. Hum. Genet. 48: 331-335.


## CHROMOSOMAL LOCATION

Genetic locus: GPC5 (human) mapping to 13q31.3.

## PRODUCT

glypican-5 (h): 293T Lysate represents a lysate of human glypican-5 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.

## APPLICATIONS

glypican-5 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive glypican-5 antibodies. Recommended use: 10-20 µl per lane.

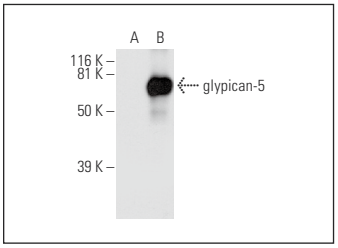
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

glypican-5 (F-3): sc-390838 is recommended as a positive control antibody for Western Blot analysis of enhanced human glypican-5 expression in glypican-5 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## 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.

## DATA




glypican-5 (F-3): sc-390838. Western blot analysis of glypican-5 expression in non-transfected: sc-117752 (**A**) and human glypican-5 transfected: sc-115481 (**B**) 293T whole cell lysates.

## 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.