## 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.

## CHROMOSOMAL LOCATION

Genetic locus: GPC5 (human) mapping to 13q31.3; Gpc5 (mouse) mapping to 14 E4.

## SOURCE

glypican-5 (L-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of glypican- 5 of human origin.

## PRODUCT

Each vial contains $100 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-84278 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## STORAGE

Store at $4^{\circ}$ C, ${ }^{* *}$ DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

glypican-5 (L-20) is recommended for detection of glypican-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 $\mu \mathrm{g}$ per $100-500 \mu \mathrm{~g}$ 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); non cross-reactive with other glypican family members.
glypican-5 (L-20) is also recommended for detection of glypican-5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for glypican-5 siRNA (h): sc-75151, glypican-5 siRNA (m): sc-145458, glypican-5 shRNA Plasmid (h): sc-75151-SH, glypican-5 shRNA Plasmid (m): sc-145458-SH, glypican-5 shRNA (h) Lentiviral Particles: sc-75151-V and glypican-5 shRNA (m) Lentiviral Particles: sc-145458-V.
Molecular Weight of glypican-5: 64 kDa .
Positive Controls: glypican-5 (h): 293T Lysate: sc-115481.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker ${ }^{\top \mathrm{M}}$ compatible goat antirabbit IgG-HRP: sc-2030 (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 $/ 2.0 \mathrm{ml}$ ). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA


glypican-5 (L-20): sc-84278. 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 or our catalog for detailed protocols and support products.

Try glypican-5 (F-3): sc-390838, our highly recommended monoclonal alternative to glypican-5 (L-20).

