**BACKGROUND**

The glypicans are a family of glycosylphosphatidylinositol-anchored heparan sulfate proteoglycans that are involved in the control of cell growth and division. Glypican-4 (GPC4), also known as K-glypican, is a 556 amino acid cell surface proteoglycan that is thought to play a role in the development of the central nervous system and tubules of the kidney. Following cleavage, glypican-4 becomes a secreted protein which localizes to extracellular space. Glypican-4 regulates FGF-2 activity during cortical neurogenesis and is encoded by a gene that maps to human chromosome Xq26.2 and mouse chromosome X A5. Deletion of the glypican-4 gene may be associated with Simpson-Golabi-Behmels syndrome, an X-linked syndrome that is clinically similar to Beckwith-Wiedemann syndrome.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GPC4 (human) mapping to Xq26.2; Gpc4 (mouse) mapping to X A5.

**SOURCE**

glypican-4 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of glypican-4 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-247028 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

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

**APPLICATIONS**

glypican-4 (S-17) is recommended for detection of glypican-4 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 1:50-1:150) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other glypican family members.

glypican-4 (S-17) is also recommended for detection of glypican-4 in additional species, including equine, canine, bovine and porcine.


Molecular Weight of glypican-4: 62 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 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 Weights 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-2033 (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**

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

**RESEARCH USE**

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