

# glypican-6 (T-20): sc-84282

## BACKGROUND

The glypicans are a family of glycosylphosphatidylinositol-anchored heparan sulfate proteoglycans that are involved in the control of cell growth and division. Glypican-6, also known as GPC6, is a 555 amino acid protein that exists as both a lipid-anchored cell membrane peptide, as well as a secreted protein that is released into the extracellular space. Expressed ubiquitously with highest expression in liver, kidney, colon, ovary and small intestine, glypican-6 functions as a cell surface receptor that is thought to bind to a variety of proteins, including growth factors, proteases and extracellular matrix proteins. The gene encoding glypican-6 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome.

## REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 604404. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Filmus, J. 2001. Glypicans in growth control and cancer. *Glycobiology* 11: 19R-23R.
5. De Cat, B. and David, G. 2001. Developmental roles of the glypicans. *Semin. Cell Dev. Biol.* 12: 117-125.
6. Bassett, J.H., Swinhoe, R., Chassande, O., Samarut, J. and Williams, G.R. 2006. Thyroid hormone regulates heparan sulfate proteoglycan expression in the growth plate. *Endocrinology* 147: 295-305.
7. Filmus, J., Capurro, M. and Rast, J. 2008. Glypicans. *Genome Biol.* 9: 224.

## CHROMOSOMAL LOCATION

Genetic locus: GPC6 (human) mapping to 13q31.3; Gpc6 (mouse) mapping to 14 E4.

## SOURCE

glypican-6 (T-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of glypican-6 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, ready P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

glypican-6 (T-20) is recommended for detection of glypican-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-6 (T-20) is also recommended for detection of glypican-6 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for glypican-6 siRNA (h): sc-75152, glypican-6 siRNA (m): sc-145459, glypican-6 shRNA Plasmid (h): sc-75152-SH, glypican-6 shRNA Plasmid (m): sc-145459-SH, glypican-6 shRNA (h) Lentiviral Particles: sc-75152-V and glypican-6 shRNA (m) Lentiviral Particles: sc-145459-V.

Molecular Weight of glypican-6: 60 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

## 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™ compatible goat anti-rabbit 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) 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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.