

## Glypican-3 Polyclonal Antibody

Catalog # AP73389

### Specification

#### Glypican-3 Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	<a href="#">P51654</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

#### Glypican-3 Polyclonal Antibody - Additional Information

##### Gene ID 2719

##### Other Names

GPC3; OCI5; Glypican-3; GTR2-2; Intestinal protein OCI-5; MXR7

##### Dilution

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications.

IHC-P~~N/A

##### Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

##### Storage Conditions

-20°C

#### Glypican-3 Polyclonal Antibody - Protein Information

##### Name GPC3

##### Synonyms OCI5

##### Function

Cell surface proteoglycan (PubMed:[14610063](http://www.uniprot.org/citations/14610063)). Negatively regulates the hedgehog signaling pathway when attached via the GPI- anchor to the cell surface by competing with the hedgehog receptor PTC1 for binding to hedgehog proteins (By similarity). Binding to the hedgehog protein SHH triggers internalization of the complex by endocytosis and its subsequent lysosomal degradation (By similarity). Positively regulates the canonical Wnt signaling pathway by binding to the Wnt receptor Frizzled and stimulating the binding of the Frizzled receptor to Wnt ligands (PubMed:[16227623](http://www.uniprot.org/citations/16227623), PubMed:[24496449](http://www.uniprot.org/citations/24496449)). Positively regulates the non-canonical Wnt signaling pathway (By similarity). Binds to CD81 which decreases the availability of free CD81 for binding to the transcriptional repressor HHEX, resulting in nuclear translocation of HHEX and transcriptional repression (By similarity). Inhibits the dipeptidyl

peptidase activity of DPP4 (PubMed:<a href="http://www.uniprot.org/citations/17549790" target="\_blank">17549790</a>). Plays a role in limb patterning and skeletal development by controlling the cellular response to BMP4 (By similarity). Modulates the effects of growth factors BMP2, BMP7 and FGF7 on renal branching morphogenesis (By similarity). Required for coronary vascular development (By similarity). Plays a role in regulating cell movements during gastrulation (By similarity).

#### Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P13265}; Extracellular side {ECO:0000250|UniProtKB:P13265}

#### Tissue Location

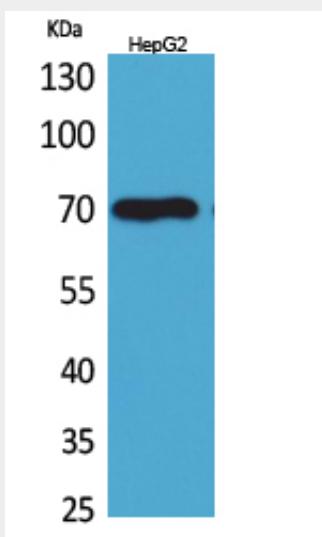
Detected in placenta (at protein level) (PubMed:32337544). Highly expressed in lung, liver and kidney

### Glypican-3 Polyclonal Antibody - Protocols

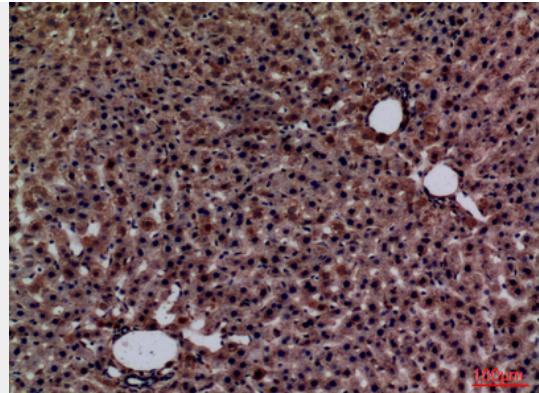
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Glypican-3 Polyclonal Antibody - Images



Western Blot analysis of HepG2 cells using Glypican-3 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded rat-liver, antibody was diluted at 1:100

### **Glypican-3 Polyclonal Antibody - Background**

Cell surface proteoglycan that bears heparan sulfate (PubMed:14610063). Negatively regulates the hedgehog signaling pathway when attached via the GPI-anchor to the cell surface by competing with the hedgehog receptor PTC1 for binding to hedgehog proteins (By similarity). Binding to the hedgehog protein SHH triggers internalization of the complex by endocytosis and its subsequent lysosomal degradation (By similarity). Positively regulates the canonical Wnt signaling pathway by binding to the Wnt receptor Frizzled and stimulating the binding of the Frizzled receptor to Wnt ligands (PubMed:16227623, PubMed:24496449). Positively regulates the non-canonical Wnt signaling pathway (By similarity). Binds to CD81 which decreases the availability of free CD81 for binding to the transcriptional repressor HHEX, resulting in nuclear translocation of HHEX and transcriptional repression (By similarity). Inhibits the dipeptidyl peptidase activity of DPP4 (PubMed:17549790). Plays a role in limb patterning and skeletal development by controlling the cellular response to BMP4 (By similarity). Modulates the effects of growth factors BMP2, BMP7 and FGF7 on renal branching morphogenesis (By similarity). Required for coronary vascular development (By similarity). Plays a role in regulating cell movements during gastrulation (By similarity).