

# Glypican-3 Polyclonal Antibody

Catalog # AP73389

### **Product Information**

Application WB, IHC-P Primary Accession P51654

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW65563

#### **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~~Western Blot: 1/500 - 1/2000. IHC-p:

1:100-300 ELISA: 1/20000. Not yet tested in other applications.

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

azide.

Storage Conditions -20°C

#### **Protein Information**

Name GPC3

Synonyms OCI5

**Function** Cell surface proteoglycan (PubMed: <u>14610063</u>). 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).

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

Extracellular side {ECO:0000250|UniProtKB:P13265}

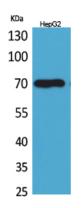
**Tissue Location** Detected in placenta (at protein level) (PubMed:32337544). Highly expressed

in lung, liver and kidney

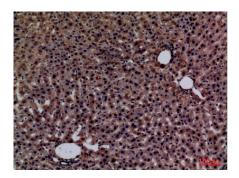
# **Background**

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).

## **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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.