

**Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide  
Mouse Monoclonal Antibody [Clone 1G12 ]  
Catalog # AH11314**

**Specification**

**Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide -  
Product Information**

Application	,2,3,4,
Primary Accession	<a href="#">P51654</a>
Other Accession	<a href="#">2719</a> , <a href="#">644108</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	67kDa KDa

**Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide -  
Additional Information**

**Gene ID** 2719

**Other Names**

Glypican-3, GTR2-2, Intestinal protein OCI-5, MXR7, Secreted glypican-3, GPC3, OCI5

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide -  
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

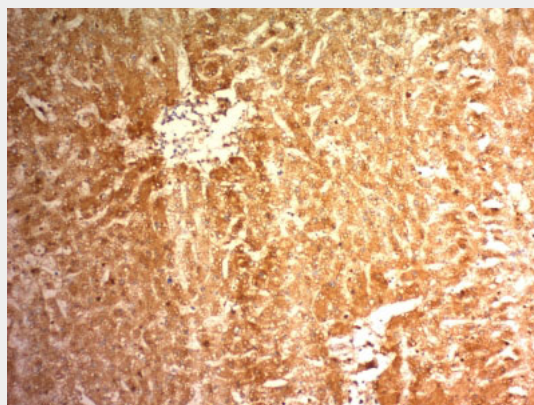
Detected in placenta (at protein level) (PubMed:32337544). Highly expressed in lung, liver and kidney

### **Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - 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 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Images**



Formalin-fixed, paraffin-embedded human Hepatocellular Carcinoma stained with Glypican-3 Monoclonal Antibody (1G12)

### **Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Background**

Recognizes a protein, which is identified as HGAL. It contains a putative PDZ-interacting domain, an

immunoreceptor tyrosine-based activation motif (ITAM), and two putative SH2 binding sites. In B cells, its expression is specifically induced by interleukin-4. HGAL is specifically expressed in germinal center B-cells, but is absent in mantle and marginal zone B-cells and in the inter-follicular and para-cortical regions in normal tonsils and lymph nodes. Its high degree of specificity for germinal center B-cells makes anti-HGAL an ideal marker for the detection of germinal center-derived B-cell lymphomas. HGAL expression has been used to help elucidate nodal marginal zone lymphoma (NMZL) from cases of diffuse follicle center lymphoma. Additionally, HGAL expression was shown to correlate with survival in patients with diffuse large B-cell lymphoma (DLBCL).

### **Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - References**

Yan, B., et al. 2011. Expression and clinicopathologic significance of glypican 3 in hepatocellular carcinoma. *Ann. Diagn. Pathol.* 15: 162-169