

# anti-human Glypican - 3 Product Data Sheet

## 4A5 Monoclonal antibody to human Glypican-3 (GPC3)



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### BACKGROUND

Glypican-3 (GPC3) is a member of the glypican family of glycosyl phosphatidylinositol-anchored cell-surface heparan sulfate proteoglycans. The 4A5 monoclonal antibody has been used to assess GPC3 expression in malignant and nonmalignant liver tissue samples and for enzyme-linked immunosorbent assay (ELISA) for detection of GPC3 in the serum. Studies have shown that GPC3 is expressed at the protein level in most HCCs, but it is undetectable in normal liver and benign hepatic lesions, including dysplastic and cirrhotic nodules. In addition, GPC3 is significantly elevated in the serum of a large proportion of patients with HCC. Based on these results, it has been proposed that GPC3 could be a useful marker to differentiate between benign and malignant liver diseases.

### IMMUNOGEN

Balb/C mice immunized with a single i.p. injection of a fragment containing the N-terminal portion of GPC3.

### SHIP CONDITIONS

Ship at ambient temperature, refrigerate upon arrival.

### STORAGE

Product should be stored at 2<sup>o</sup>-8<sup>o</sup>C.

### STABILITY

Products are stable for one (1) year from purchase when stored properly.

### References:

- Capurro, M. and Filmus, J. Glypican-3 as a serum marker for hepatocellular carcinoma. *Cancer Res*, 65: 372; author reply 372-373., 2005
- Wang X.Y., Degos F., Dubois S., Tessitore S., Allegretta M., Guttman R.D., Jothy S., Belghiti J., Bedossa P., Paradis V. Glypican-3 expression in hepatocellular tumors: diagnostic value for preneoplastic lesions and hepatocellular carcinomas. *Human Pathology*. Nov;37(11):1435-41. 2006.
- Libbrecht L., Severi T., Cassiman D., Borghet S.V., Pirenne J., Nevens F., Verslype C., van Pelt J., Roskams T. Glypican-3 expression distinguishes small hepatocellular carcinomas from cirrhosis, dysplastic nodules, and focal nodular hyperplasia-like nodules. *Am J Surg Pathol*. Nov;30(11):1405-11, 2006.
- Di Tommaso L, Franchi G, Park YN, Fiamengo B, Destro A, Morengi E, Montorsi M, Torzilli G, Tommasini M, Terracciano L, Tornillo L, Vecchione R and Roncalli M. Diagnostic value of HSP70, glypican 3, and glutamine synthetase in hepatocellular nodules in cirrhosis. , *Mar*;45(3):725-34, 2007.

### Ordering Information

<b>Catalog #s -</b>	B0039R
<b>Size -</b>	100 microgram
<b>Form -</b>	Protein G-Purified
<b>Host/Clone -</b>	Mouse/4A5
<b>Formulation -</b>	Phosphate buffered saline with 0.08% sodium azide
<b>Concentration -</b>	0.5 milligram / ml
<b>Isotype -</b>	IgG1
<b>Application -</b>	ELISA, Western Blot, Immunohistochemistry