

Mouse Anti-Glypican-3/GPC3 [1G12]: MC0281, MC0281RTU7

Intended Use: For Research Use Only

Description: Glypican-3 (GPC3) is a member of the glypican family of glycosyl phosphatidylinositol-anchored cell-surface heparan sulfate proteoglycans. GPC3 is a tissue and serum biomarker for the early detection of hepatocellular carcinoma. The anti-GPC3 antibody has been used to assess GPC3 expression in malignant and non-malignant liver tissue samples and for quantitative ELISA detection of GPC3 concentration in the serum. Capurro et al. have shown that GPC3 is expressed at the protein level by immunohistochemistry in most cases of primary liver cancer including small tumors, but is undetectable in normal liver and benign hepatic lesions. In addition, the authors found that GPC3 is significantly elevated in the serum of a large proportion of patients with Primary Liver Cancer.

Specifications

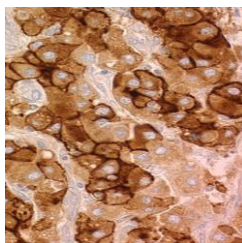
Clone: 1G12
 Source: Mouse
 Isotype: IgG1k
 Localization: Cytoplasm, membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2-8°C
 Applications: IHC, Flow Cyt., IF
 Package:

Description	Catalog No.	Size
Glypican-3/GPC3 Concentrated	MC0281	1 ml
Glypican-3/GPC3 Prediluted	MC0281RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Hepatocellular Carcinoma (HCC)
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH 9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human HCC tissue stained with anti-GPC3 using DAB

References:

1. Microarray-base analysis for hepatocellular carcinoma: From gene expression profiling to new challenges. Yutaka Midorikawa, et al. World J Gastroenterol. March 14; 13(10): 1487- 1492, 2007.
2. Serum tumor markers for detection of hepatocellular carcinoma. Lin Zhou, et al. World J Gastroenterol. February 28; 12(8):1175-1181, 2006.
3. Glypican-3 Promotes the Growth of Hepatocellular Carcinoma by Stimulating Canonical Wnt Signaling. Mariana I. Capurro, et al. Cancer Res. 65(14): 6245-54, 2005.
4. Expression and significance of tumor-related genes in HCC. Zi-Li Lú, et al. World J Gastroenterol. 11(25):3850-3854, 2005.

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