

## Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody

Mouse Monoclonal Antibody [Clone 1G12]

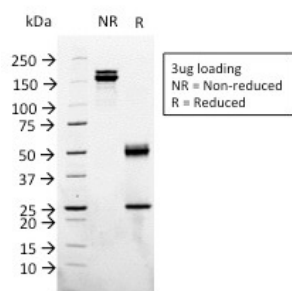
Catalog No	Format	Size
2719-MSM1-P0	Purified Ab with BSA and Azide	200ug/ml
2719-MSM1-P1	Purified Ab with BSA and Azide	200ug/ml
2719-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

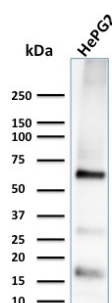
Product Details	
Clone	1G12
Gene Name	GPC3
Immunogen	A recombinant fragment containing amino acids 511-580 of human glypican-3
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	~67kDa
Cellular Localization	Cell membrane
Species Reactivity	Human
Positive Control	293T cells. Hepatocellular carcinoma., HePG2

*\*Optimal dilution for a specific application should be determined.*

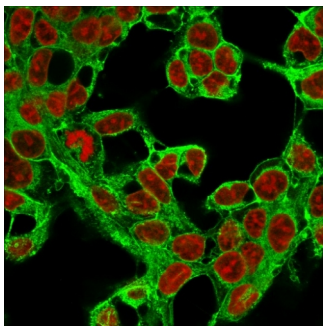
### Product Images for Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Antibody



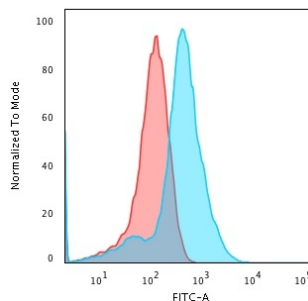
SDS-PAGE of Purified Glypican-3 Monoclonal Antibody (1G12). Confirmation of Integrity and Purity of Antibody.



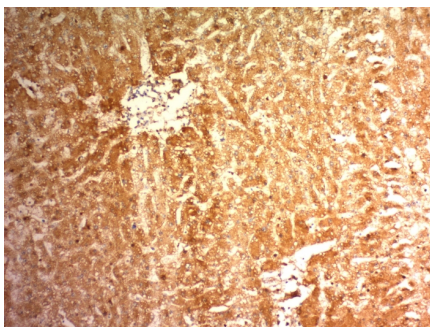
Western Blot Analysis of HePG2 cell lysate using Glypican-3 Monoclonal Antibody (1G12)



Immunofluorescence Analysis of MeOH-fixed HepG2 cells labeling Glypican-3 with Glypican-3 Monoclonal Antibody (1G12) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Reddot (Red)



Flow Cytometric Analysis of MeOH-fixed HepG2 cells using Glypican-3 Monoclonal Antibody (1G12) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



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

### Specificity & Comments

Glypican-3 (GPC3) is a glycosylphosphatidyl inositol-anchored membrane protein, which may also be found in a secreted form. Anti-GPC3 has been identified as a useful tumor marker for the diagnosis of hepatocellular carcinoma (HCC), hepatoblastoma, melanoma, testicular germ cell tumors, and Wilm's tumor. In patients with HCC, GPC3 is overexpressed in neoplastic liver tissue and elevated in serum, but is undetectable in normal liver, benign liver, and the serum of healthy donors. GPC3 expression is also found to be higher in HCC liver tissue than in cirrhotic liver or liver with focal lesions such as dysplastic nodules and areas of hepatic adenoma (HA) with malignant transformation. In the context of testicular germ cell tumors, GPC3 expression is up regulated in certain histologic subtypes, specifically yolk sac tumors and choriocarcinoma. A high level of GPC3 expression is also found in some types of embryonal tumors, such as Wilm's tumor and hepatoblastoma, with a low or undetectable expression in normal adjacent tissue. In patients with thyroid cancer, expression of GPC3 is dramatically enhanced in certain types of cancers: 100% in follicular carcinoma and 70% in papillary carcinoma. Expression of GPC3 in follicular carcinoma is significantly higher than that of follicular adenoma. In contrast, GPC3 is not expressed in anaplastic carcinoma.

### Research Areas

Cancer, Cardiovascular, Infectious Disease

### Known Applications & Suggested Dilutions

Western Blot (1-2ug/ml) | Flow Cytometry (1-2ug/million cells) | Immunofluorescence (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT) (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

### Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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