

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

Mouse Monoclonal Antibody [Clone rGPC3/863]

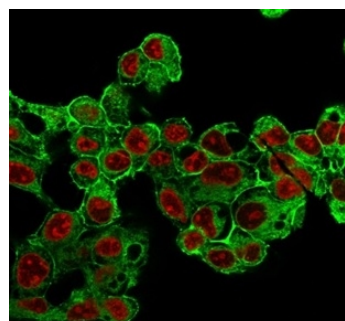
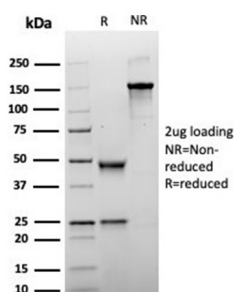
Catalog No	Format	Size
2719-MSM6-P0	Purified Ab with BSA and Azide	200ug/ml
2719-MSM6-P1	Purified Ab with BSA and Azide	200ug/ml
2719-MSM6-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

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

Product Details	
Clone	rGPC3/863
Gene Name	GPC3
Immunogen	Recombinant full-length human GPC3 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	~67kDa
Cellular Localization	Cell membrane
Species Reactivity	Human, Rat
Positive Control	HepG2 or 293T cells. Human hepatocellular carcinoma.

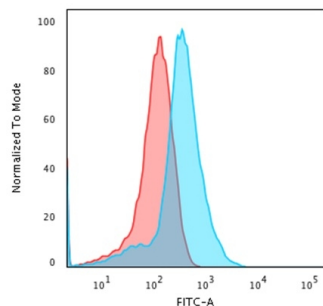
\*Optimal dilution for a specific application should be determined.

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

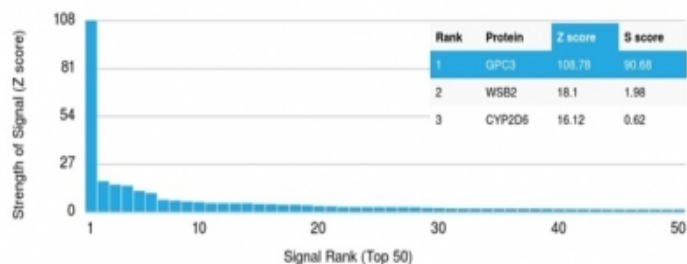


SDS-PAGE Analysis Purified Glypican-3 Mouse Recombinant Monoclonal Antibody (rGPC3/863). Confirmation of Integrity and Purity of Antibody.

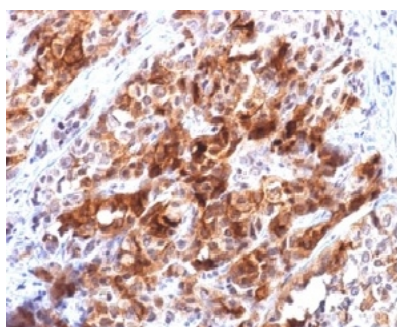
Immunofluorescence Analysis of MeOH-fixed HepG2 cells labeling GPC3. Glypican-3 Recombinant Mouse Monoclonal Antibody (rGPC3/863) followed by goat anti-mouse IgG-CF488 (green). Counterstain is RedDot (red).



Flow Cytometric Analysis of MeOH-fixed HepG2 cells. Glypican-3 Recombinant Mouse Monoclonal Antibody (rGPC3/863) followed by goat anti-mouse IgG- CF488 (blue); isotype control (red).



Analysis of Protein Array containing more than 19,000 full-length human proteins using Glypican-3 Recombinant Mouse Monoclonal Antibody (rGPC3/863). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human hepatocellular carcinoma stained with Glypican-3 Mouse Recombinant Monoclonal Antibody (rGPC3/863).

### 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

Cardiovascular, Infectious Disease

### Known Applications & Suggested Dilutions

Flow Cytometry (0.5-1ug/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.

### 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.

### Supplied As

200ug/ml of Ab purified by Protein A Column. 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.