

12-1003: Recombinant Mouse Monoclonal Antibody to Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker)(Clone : rGPC3/863)

Clonality :	Monoclonal
Clone Name :	rGPC3/863
Application :	FACS,IF,IHC
Reactivity :	Human, Rat
Gene :	GPC3
Gene ID :	2719
Uniprot ID :	P51654
Format :	Purified
Alternative Name :	DGSX, Glypican proteoglycan 3, GPC3, GTR2-2, Heparan sulphate proteoglycan, Intestinal protein OCI-5, MXR7, OCI-5, SDYS, Secreted glypican-3, SGBS1
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant full-length human GPC3 protein

Description

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.

Product Info

Amount :	20 µg / 100 µg
Purification :	Purified Ab with BSA and Azide at 200ug/ml
Content :	200ug/ml of recombinant MAb purified by Protein A/G. Prepared in 1mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Flow Cytometry (1-2 \times 10⁵µg/million cells); Immunofluorescence (1-2 \times 10⁵µg/ml); Immunohistochemistry (Formalin-fixed) (1-2 \times 10⁵µg/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);

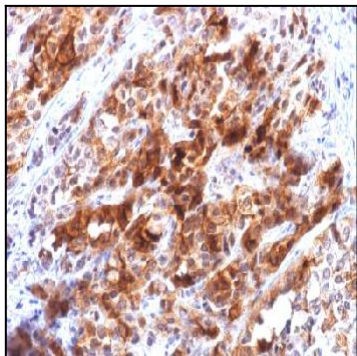


Figure 1: Formalin-fixed, paraffin-embedded human Hepatocellular Carcinoma stained with Glypican-3 Mouse Recombinant Monoclonal Antibody (rGPC3/863).

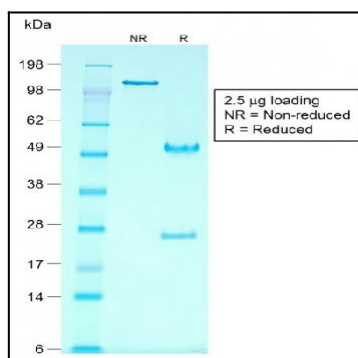


Figure 2: SDS-PAGE Analysis of Purified Glypican-3 Mouse Recombinant Monoclonal Antibody (rGPC3/863).