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BOSTER BIOLOGICAL TECHNOLOGY
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Anti-Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Monoclonal Antibody

Catalog Number: M01922

About GPC3

Glypican-3 (GPC3) is a glycosylphospatidyl 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.

Overview

Product Name	Anti-Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Monoclonal Antibody
Reactive Species	Human, Rat
Description	Boster Bio Anti-Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Monoclonal Antibody (Catalog # M01922). Tested in Flow Cytometry, IF, IHC applications. This antibody reacts with Human, Rat.
Conjugate	Biotin
Application	Flow Cytometry, IF, IHC
Clonality	Monoclonal Clone: rGPC3/863
Formulation	Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage Instructions	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.
Host	Mouse
Uniprot ID	P51654

Technical Details

Immunogen	Recombinant full-length human GPC3 protein

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Predicted Reactive Species	Pig, Rabbit
Cross Reactivity	Does not cross-react with primate, avian or amphibian GR.
Isotype	IgG1, kappa
Form	Liquid
Concentration	Purified antibody with BSA and azide at 200ug/ml
Purification	200ug/ml of antibody purified by Protein A Column.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: 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 &degC followed by cooling at RT for 20 minutes) Optimal dilution for a specific application should be determined.

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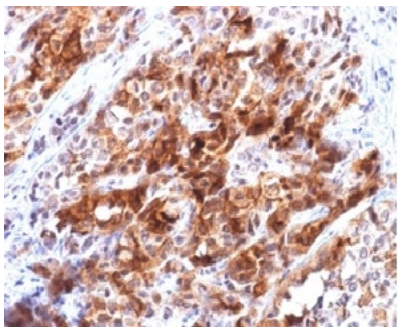
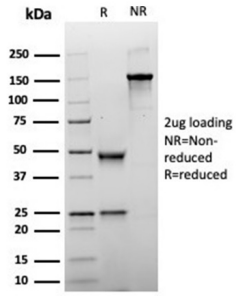
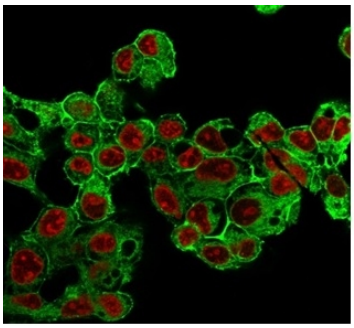
Anti-Glypican-3 (GPC3) (Hepatocellular Carcinoma Marker) Monoclonal Antibody (M01922) Images



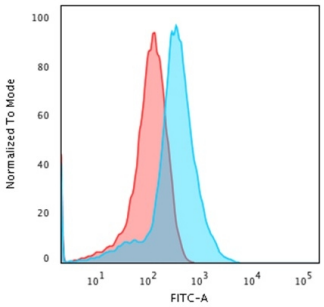
Formalin-fixed, paraffin-embedded human hepatocellular carcinoma stained with Anti-Glypican-3 Mouse Recombinant Monoclonal Antibody (rGPC3/863).



SDS-PAGE analysis purified Anti-Glypican-3 Mouse Recombinant Monoclonal Antibody (rGPC3/863). Confirmation of integrity and purity of antibody.



Immunofluorescence analysis of MeOH-fixed HepG2 cells labeling GPC3. Anti-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. Anti-Glypican-3 Recombinant Mouse Monoclonal Antibody (rGPC3/863) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).

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