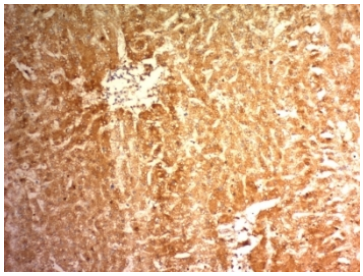
Glypican-3 Antibody [clone 1G12] (V2536)

Catalog No.	Formulation	Size
V2536-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2536-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2536SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2536IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

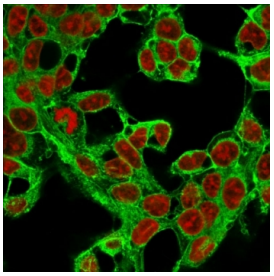
Citations (13)

Bulk quote request

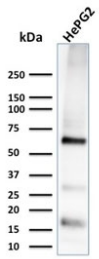
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	1G12
Purity	Protein G affinity chromatography
UniProt	P51654
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This Glypican-3 antibody is available for research use only.



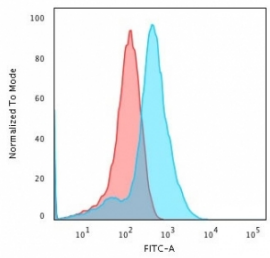
IHC: Formalin-fixed, paraffin-embedded human hepatocellular carcinoma stained with Glypican-3 antibody (clone 1G12).



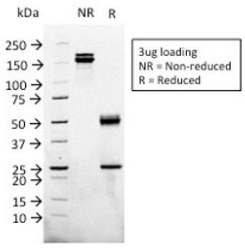
Immunofluorescent staining of methanol-fixed HepG2 cells with Glypican-3 antibody (green, clone 1G12) and Reddot nuclear stain (red).



Western blot testing of human HePG2 cell lysate with Glypican-3 antibody (clone 1G12). Expected molecular weight 66-115 kDa depending on glycosylation level.



Flow cytometry testing of methanol-fixed human HepG2 cells with Glypican-3 antibody (clone 1G12); Red=isotype control, Blue= Glypican-3 antibody.



SDS-PAGE analysis of purified, BSA-free Glypican-3 antibody (clone 1G12) as confirmation of integrity and purity.

Description

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 Wilmï¿½s 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.

Application Notes

Optimal dilution of the Glypican-3 antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A recombinant fragment containing amino acids 511-580 from the human protein was used as the immunogen for the Glypican-3 antibody.

Storage

Store the Glypican-3 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).