

# Glypican-3 (GPC3) (Marker of Hepatocellular Carcinoma); Clone 1G12 (Concentrate)


**Availability/Contents:**


<u>Item #</u>	<u>Volume</u>
RA0124-C.5	0.5 ml

**Description:**

Species:	Mouse
Immunogen:	A recombinant fragment containing amino acids 511-580 of human glypican-3
Clone:	1G12
Isotype:	IgG1, kappa
Entrez Gene ID:	2719 (Human)
Hu Chromosome Loc.:	Xq26.2
Synonyms:	DGSX; Glypican proteoglycan 3; GPC3; GTR2-2; Heparan sulphate proteoglycan; Intestinal protein OCI-5; MXR7; OCI-5; SDYS; Secreted glypican-3; SGBS1
Mol. Weight of Antigen:	67kDa
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 1mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	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.
Background:	Glypican-3 (GPC3) is an integral membrane protein that is mutated in the Simpson-Golabi-Behmel syndrome (SGBS). SGBS is characterized by pre- and post-natal overgrowth and is a recessive X-linked condition. GPC3 may also be found in a secreted form. 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 has also been found in some types of embryonal tumors, such as Wilm's tumor and hepatoblastoma, with a low or undetectable expression in normal adjacent tissue.
Species Reactivity:	Human. Others not known.
Positive Control:	293T cells or Hepatocellular carcinoma.
Cellular Localization:	Cytoplasmic
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1 µg/million cells Immunofluorescence: 0.5-1 µg/ml Western Blotting: 0.5-1 µg/ml Immunoprecipitation: 0.5-1 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

 Storage: 2° C  8° C


 ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.



 EmergoEurope (31)(0) 70 345-8570  
 Molsnstraat 15  
 2513 BH Hague, The Netherlands

**Uses/Limitations:** Not to be taken internally.  
For Research Use Only.  
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
Do not use if reagent becomes cloudy.  
Do not use past expiration date.  
Non-Sterile.

**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

**Procedure:**

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with EDTA Buffer (10X) HIER Solution (pH 8.0) (ScyTek catalog# ETA).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).


**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
Do not pipette by mouth.  
Avoid contact of reagents and specimens with skin and mucous membranes.  
Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Yan, B., et al. 2011. Expression and clinicopathologic significance of glypican 3 in hepatocellular carcinoma. Ann. Diagn. Pathol. 15: 162-169.
2. Ning, S., et al. 2012. Glypican-3, a novel prognostic marker of hepatocellular cancer, is related with postoperative metastasis and recurrence in hepatocellular cancer patients. Mol. Biol. Rep. 39: 351-357.
3. Zhang, L., et al. 2012. Glypican-3 as a potential differential diagnosis marker for hepatocellular carcinoma: a tissue microarray-based study. Acta Histochem. 114: 547-552.

**Warranty:**


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