GLYPICAN 3 (1G12)

Format	Catalog No.	Pack size	Dilution
Concentrated	G01702 A, B, C	0.1, 0.5, 1.0 mL	1:100-200
Prediluted	G01702 AA, BB	6.0, 3.0 mL	Ready to use

SPECIES: Mouse

IMMUNOGEN: A recombinant fragment containing amino acids 511-580 of human glypican-3

CLONE: 1G12

ISOTYPE: IgG1, kappa

FORMAT: 200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 1mM EDTA with 0.05% BSA & 0.05% azide.

SPECIFICITY: Hepatocellular carcinoma (HCC), hepatoblastoma, melanoma, testicular germ cell tumours, and Wilm's tumour can all be diagnosed with the help of anti-GPC3.

SPECIES REACTIVITY : Human. Others not known. Positive Control: 293T cells or Hepatocellular carcinoma. Cellular Localization: Cytoplasmic Titer/ Working Dilution:

POSITIVE CONTROL : 293T cells or Hepatocellular carcinoma

CELLULAR LOCALIZATION : Cytoplasmic

INTENDED USE: For Research Use Only (RUO).

BACKGROUND –

Simpson-Golabi Behmel syndrome (SGBS) is caused by a mutation in the integral membrane protein Glypican-3 (GPC3). SGBS is a recessive X-linked disorder that is typified by prenatal and postnatal overgrowth. There may also be a secreted version of GPC3. GPC3 is not detected in normal liver, benign liver, or the serum of healthy donors, but it is overexpressed in neoplastic liver tissue and raised in serum in patients with HCC. Additionally, compared to cirrhotic liver or liver with specific lesions like dysplastic nodules and regions of hepatic adenoma (HA) with malignant transformation, GPC3 expression is higher in HCC liver tissue. GPC3 expression is elevated in some histologic subtypes of testicular germ cell tumours, including choriocarcinoma and yolk sac tumours. Certain forms of embryonal tumours, including hepatoblastoma and Wilm's tumour, have also been shown to express GPC3 at a high level, but normal surrounding tissue shows little to no expression of GPC3.

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.

LIMITATIONS AND USES:

1. Not to be consumed internally.
2. For diagnostic purposes in vitro.
3. This product is designed for qualitative immunohistochemistry using formalin-fixed, paraffin-embedded
4. tissue sections from both normal and malignant tissues, which will be examined under a light microscope.
5. If the reagent gets hazy, don't use it.
6. Never use after the expiration date.
7. When working with reagents, exercise caution.
8. Not sterile.

PROCEDURE –

1. **Tissue Section Pretreatment (Necessary):** Applying EDTA Buffer (10X) HIER Solution (pH 8.0) beforehand greatly improves the staining of tissue slices that have been paraffin embedded and fixed with formalin.
2. **Incubation Time for Primary Antibody:** We recommend 30 minutes at room temperature for incubation.
   However, the user should choose the best incubation time based on the staining system used and the fixing circumstances.
3. **Visualisation:** To get the highest staining intensity, we advise combining the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" with the HRP Lab Pack" .

PRECAUTIONS –

1. Contains 0.09% w/v sodium azide as a preservative.
2. Avoid pipetting by mouth.
3. Reagents and specimens should not come into touch with skin or mucous membranes.
4. Prevent reagent contamination by microorganisms, as this could lead to an increase in nonspecific staining.
5. There are no dangerous materials in this product.

STABILITY AND STORAGE –

Avoid freezing. Keep between 2 and 8°C. After use, immediately return to 2–8°. Never use after the label's stated expiration date. Before using the antibody, visually confirm that it hasn't been contaminated. If the reagent precipitates or gets hazy, do not use it.

RESTRICTIONS–

Histological and immunological detection techniques are both used in the intricate process of immunohistochemistry. Results from tissue handling and processing before immunostaining can vary. Results may differ depending on the intrinsic characteristics of the tissue samples or on differences in fixation and embedding. Depending on the detection method employed, endogenous biotin and endogenous peroxidase or pseudoperoxidase activity in erythrocytes may result in non-specific staining. The methods and suggestions in this data sheet were verified with Genebio IHC reagents and might not work with other detection systems.

TECHNICAL SUPPORT

For technical assistance, please contact Genebio Solution's Technical Support at www.genebiosolution.com

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