

PRODUCT INFORMATION



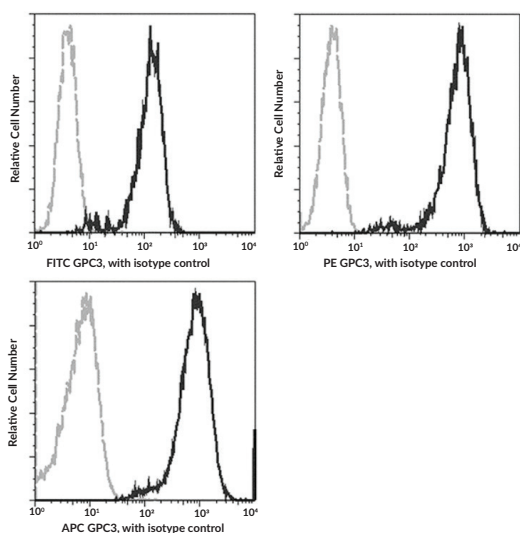
Glypican-3 Rabbit Monoclonal Antibody (APC) (Clone 024)

Item No. 39540

Overview and Properties

| | |
|----------------------------|---|
| Contents: | This vial contains protein A-affinity purified monoclonal antibody |
| Synonyms: | GPC3, MXR7, OCI-5 |
| Immunogen: | A synthetic peptide corresponding to the central region of human glypican-3 |
| Cross Reactivity: | (+) Glypican-3 |
| Species Reactivity: | (+) Human |
| Form: | Liquid |
| Storage: | 2-8°C (as supplied) |
| Stability: | ≥1 year |
| Storage Buffer: | PBS with 0.5% BSA and 0.03% ProClin™ 300 |
| Concentration: | 10 µl/Test, 0.1 mg/ml |
| Clone: | 024 |
| Host: | Rabbit |
| Isotype: | IgG |
| Application: | Flow cytometry (FC); the optimal working concentration/dilution should be determined empirically. |

Image



Flow cytometric analysis of Human GPC3 expression in HepG2 cells. Cells were stained with Glypican-3 Rabbit Monoclonal Antibody (APC) (Clone 024). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics on intact cells.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Glypican-3 (GPC3) is a membrane-bound heparan sulfate proteoglycan.¹ It is composed of a signal peptide for membrane translocation, a cysteine-rich domain that contains a proteolytic cleavage site for proprotein convertases, a stalk region that contains heparan sulfate attachment sites, and a signal sequence for glycosylphosphatidylinositol (GPI) attachment, which anchors it to the cell surface. GPC3 is ubiquitously expressed during embryonic development and is only expressed in select adult tissues, including gastric glands and kidney tubules.^{2,3} It is involved in canonical and non-canonical Wnt signaling and binds to various Wnt ligands and Frizzled receptors.^{1,4} GPC3-targeting antibodies induce antibody-dependent cellular cytotoxicity (ADCC) and reduce tumor growth in hepatocellular carcinoma (HCC) mouse xenograft models.⁵ Hepatic levels of GPC3 are increased in patients with HCC.⁶ Mutations in *GPC3* are associated with Simpson-Golabi-Behmel syndrome (SGBS), an X-linked condition characterized by pre- and post-natal overgrowth.² Cayman's Glypican-3 Rabbit Monoclonal Antibody (APC) (Clone 024) is composed of a GPC3 monoclonal antibody conjugated to allophycocyanin (APC) and can be used for flow cytometry (FC).

References

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3. Baumhoer, D., Tornillo, L., Stadlmann, S., *et al.* Glypican 3 expression in human nonneoplastic, preneoplastic, and neoplastic tissues: A tissue microarray analysis of 4,387 tissue samples. *Am. J. Clin. Pathol.* **129**(6), 899-906 (2008).
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5. Ishiguro, T., Sugimoto, M., Kinoshita, Y., *et al.* Anti-glypican 3 antibody as a potential antitumor agent for human liver cancer. *Cancer Res.* **68**(23), 9832-9838 (2008).
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