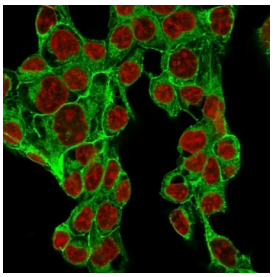
Glypican-3 Antibody GPC3/1534R / GPC3 Rabbit Monoclonal Antibody [clone GPC3/1534R] (V7261)

Catalog No.	Formulation	Size
V7261-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7261-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7261SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7261IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

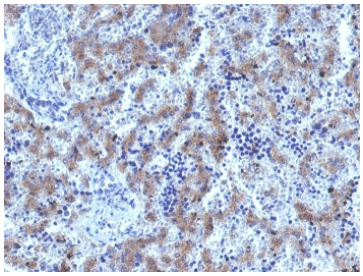
Recombinant RABBIT MONOCLONAL

Bulk quote request

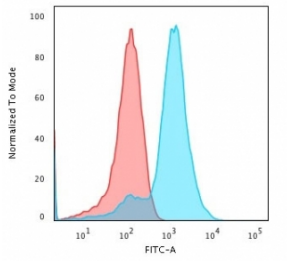
Species Reactivity	Human, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	GPC3/1534R
Purity	Protein A affinity chromatography
UniProt	P51654
Localization	Cytoplasmic
Applications	Flow cytometry: 0.5-1ug/million cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This Glypican-3 Antibody GPC3/1534R / GPC3 Rabbit Monoclonal Antibody is available for research use only.



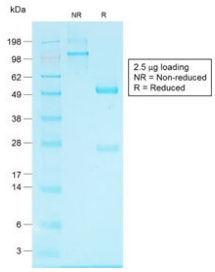
Glypican-3 Antibody GPC3/1534R IF Staining of Human HepG2 Cells. Immunofluorescence analysis of methanol-fixed human HepG2 cells using GPC3 Rabbit Monoclonal Antibody clone GPC3/1534R. Glypican-3-associated fluorescence is shown in green, while RedDot nuclear staining is shown in red. The experiment demonstrates GPC3 detection in fixed HepG2 cells.



Glypican-3 Antibody GPC3/1534R IHC Staining of Human Fetal Liver Tissue. Immunohistochemical analysis of FFPE human fetal liver tissue using GPC3 Rabbit Monoclonal Antibody clone GPC3/1534R. Brown DAB staining is observed in numerous cells, with predominantly cytoplasmic immunoreactivity and a heterogeneous distribution throughout the tissue. This staining pattern is consistent with the developmental expression of glypican-3 in fetal liver. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA at pH 9 for 10-20 minutes.



Glypican-3 Antibody GPC3/1534R FACS Staining of Human HepG2 Cells. Flow cytometry analysis of methanol-fixed human HepG2 cells using GPC3 Rabbit Monoclonal Antibody clone GPC3/1534R. The blue histogram represents antibody-stained cells, while the red histogram represents the isotype control. The experiment demonstrates GPC3 detection in fixed cells and does not establish suitability for live-cell surface staining.



Glypican-3 Antibody GPC3/1534R SDS-PAGE Analysis of Purified Antibody. SDS-PAGE analysis of purified, BSA-free GPC3 Rabbit Monoclonal Antibody clone GPC3/1534R. This experiment evaluates the integrity and purity of the antibody preparation rather than detection of endogenous glypican-3.

Description

Glypican-3 Antibody GPC3/1534R / GPC3 Rabbit Monoclonal Antibody targets glypican-3, a cell-surface heparan sulfate proteoglycan encoded by the GPC3 gene. Glypican-3 belongs to the glypican family of glycosylphosphatidylinositol (GPI)-anchored proteins that regulate extracellular signaling, cellular proliferation, and tissue development. Its protein core and attached heparan sulfate chains interact with growth factors and other signaling molecules, influencing their availability and interactions with cell-surface receptors. GPC3 also undergoes proteolytic processing, which contributes to its structural organization and biological activity.

Glypican-3 participates in several developmental signaling pathways, particularly Wnt and Hedgehog signaling. In certain cellular contexts, GPC3 enhances canonical Wnt signaling by facilitating interactions between Wnt ligands and their receptors. Conversely, glypican-3 can inhibit Hedgehog signaling by binding Hedgehog ligands and influencing their availability. These regulatory activities contribute to embryonic growth, organ development, and tissue patterning. Loss-of-function mutations in GPC3 cause Simpson-Golabi-Behmel syndrome, an X-linked overgrowth disorder characterized by developmental abnormalities and an increased risk of certain embryonal tumors.

Glypican-3 has become an important focus of cancer research because of its elevated expression in many hepatocellular carcinomas and relatively limited expression in most normal adult tissues. Its expression in malignant hepatocytes has

established GPC3 as a useful tumor-associated biomarker, particularly in studies distinguishing hepatocellular carcinoma from other hepatic lesions. Glypican-3 is also expressed in hepatoblastoma and certain other malignancies. Its extracellular accessibility has encouraged investigations of targeted therapeutic approaches, including monoclonal antibodies, antibody-drug conjugates, and engineered immune-cell therapies. However, GPC3 expression varies among tumors, and its biological effects depend on cellular context.

Beyond oncology, glypican-3 provides insight into how membrane-associated proteoglycans regulate developmental signaling and cellular growth. Changes in GPC3 expression, processing, and localization may alter interactions between extracellular ligands and their receptors. Understanding these mechanisms contributes to research into tissue morphogenesis, growth regulation, and tumor-associated signaling. Glypican-3 Antibody GPC3/1534R supports investigations of this protein in developmental biology and cancer research, particularly studies examining its expression and distribution in relation to cellular signaling and proliferation.

For an alternative monoclonal antibody targeting this cell-surface proteoglycan, see our GPC3 Antibody rGPC3/863, validated for immunohistochemistry, immunofluorescence, and flow cytometry.

Application Notes

Optimal dilution of the Glypican-3 Antibody GPC3/1534R / GPC3 Rabbit Monoclonal Antibody should be determined by the researcher.

1. 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 full length human protein was used as the immunogen for the recombinant Glypican-3 antibody.

Storage

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

Alternate Names

GPC3 antibody, Glypican 3 antibody, Glypican-3 protein antibody, DGSX antibody, MXR7 antibody, OCI-5 antibody, Intestinal protein OCI-5 antibody, Heparan sulfate proteoglycan glypican-3 antibody, Glypican family proteoglycan 3 antibody

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