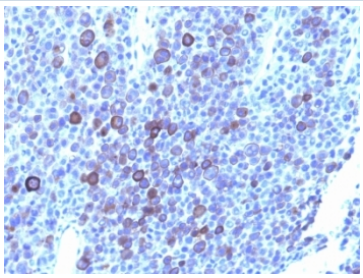
Glypican-3 Antibody Cocktail [clone 1G12 + GPC3/863] (V2539)

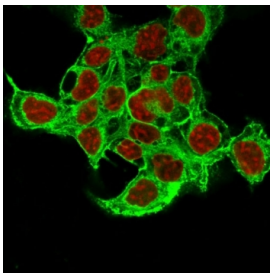
Catalog No.	Formulation	Size
V2539-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2539-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2539SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2539IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	1G12 + GPC3/863
Purity	Protein G affinity chromatography
UniProt	P51654
Localization	Cytoplasmic
Applications	Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This Glypican-3 antibody cocktail is available for research use only.



IHC: Formalin-fixed, paraffin-embedded human melanoma stained with Glypican-3 antibody (1G12 + GPC3/863)



Immunofluorescent staining of methanol-fixed HepG2 cells with Glypican-3 antibody cocktail (green, clone 1G12 + GPC3/863) and Reddot nuclear stain (red).

Description

Glypican-3 antibody clones 1G12 + GPC3/863 represent a dual-monoclonal combination designed to increase the sensitivity and reliability of GPC3 detection. Glypican-3 is a membrane-bound proteoglycan expressed in fetal liver and certain malignancies, most notably hepatocellular carcinoma. By combining two clones with complementary recognition patterns, this antibody provides robust and reproducible results across a range of tissues and disease states. NSJ Bioreagents supplies Glypican-3 antibody clones 1G12 + GPC3/863 to support oncology and diagnostic pathology research.

The antibody mixture produces strong cytoplasmic and membranous staining in hepatocellular carcinoma, confirming malignant hepatocyte differentiation. Its dual-clone design enhances detection sensitivity, making it especially useful in cases where single clone staining may be weak or heterogeneous. This is particularly valuable in early-stage tumors or small biopsy samples, where diagnostic clarity is essential.

In cancer research, the antibody combination has been used to explore how GPC3 influences tumor cell signaling and survival. GPC3 promotes tumorigenesis by modulating Wnt and Hedgehog pathways, and its consistent overexpression in HCC has made it a promising therapeutic target. Detection with this dual-clone antibody supports research into targeted therapies and immune-based approaches directed against GPC3.

The antibody is also valuable in pathology beyond HCC. GPC3 is expressed in certain germ cell tumors, including yolk sac tumors, where detection aids in accurate classification. It has also been investigated in ovarian and gastric cancers, broadening its relevance across oncology.

In developmental biology, Glypican-3 antibody clones 1G12 + GPC3/863 have been applied to studies of embryogenesis, where GPC3 expression regulates cell proliferation and tissue patterning. Their combined use ensures robust visualization of GPC3 in developmental models.

Validated in tissue and cell-based systems, the dual-clone approach produces consistent and strong staining across a range of applications. Alternate names include GPC3 antibody dual clone, hepatocellular carcinoma marker antibody, and glypican tumor marker antibody.

Application Notes

Optimal dilution of the Glypican-3 antibody cocktail 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 of human GPC3 (1G12) and recombinant full-length protein

(GPC3/863) were used as the immunogen for the Glypican-3 antibody cocktail.

Storage

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