

Technical Data Sheet

APC Conjugated Human Glypican-3 Protein (C-His)

Catalog Number: 802103, 802104

Size: 25 ug, 100 ug

Target Name: GPC3, GTR2-2, MXR7, SDYS, OCI5,

Regulatory Status: RUO

Product Details

Application: FC

Format: Liquid, APC

Expression Host: CHO

Species: Human

Sources: Human Glypican-3 (Gln25-His559) with C-terminus His tag is expressed in CHO cells and conjugated to APC.

Accession Number: P51654

Molecular Weight: The protein has a predicted molecular weight of 62kDa. Under DTT-reducing conditions, it migrates at approximately 65-100 kDa on SDS-PAGE prior to conjugation.

Affinity Tag: C-His

Formulation: 1xPBS buffer, pH7.4, 0.09% NaN₃ with a carrier protein

Endotoxin level: Not tested

Protein Concentration: 25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

Background Information

Glypicans are heparan sulfate proteoglycans anchored to the cell surface by a glycosyl-phosphatidylinositol (GPI) linkage. There are six known mammalian glypicans (GPC1 to GPC6), which can be released by the lipase Notum. They regulate signaling pathways like Wnt, Hedgehog, FGF, and BMPs. Glypican-3 (GPC3) plays a role in modulating IGF2 interactions and influences cell proliferation. It also interacts with FGF-basic via heparan sulfate chains. Mutations in GPC3 cause Simpson-Golabi-Behmel Syndrome (SGBS), leading to overgrowth, dysmorphism, and malformations. GPC3 is expressed as a 70 kDa precursor, cleaved into a 40 kDa N-terminal and 30 kDa C-terminal subunit. It is highly expressed in Hepatocellular carcinoma and melanoma, but downregulated in cancers like ovarian, cholangiocarcinoma, mesothelioma, and breast cancer due to promoter hypermethylation.