

RP00138

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Recombinant Human Glypican-3/GPC3 Protein

Catalog No.: RP00138

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	2719	P51654-1

Tags

C-His

Synonyms

GPC3;DGSX; GTR2-2; MXR7; OCI-5; SDYS; SGB; SGBS; SGBS1;GTR2-2;MXR7;OCI-5;SDYS;SGB;SGBS;SGBS1;glypican-3

Product Information

Source	Purification
HEK293 cells	> 90% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact



www.abclonal.com

Background

Glypican-3, also known as Intestinal protein OCI-5, GPC3, and OCI5, is a member of the glypican family. It belongs to the glypican family and is highly expressed in the lung, liver, and kidney. It is a heparan sulfate proteoglycan, which is overexpressed in various neoplasms such as hepatocellular carcinoma, malignant melanoma, and testicular yolk sac tumor, and plays an important role in cell growth and differentiation. GPC3 function is tissue-dependent. In some tissues, GPC3 acts as a tumor suppressor gene, whereas in others, it acts as an oncofetal protein. Studies have shown that GPC3 is a reliable marker for hepatocellular carcinoma. The sensitivity and specificity exceed both alpha-fetoprotein and hepatocyte-paraffin1. GPC3 immunohistochemistry can aid in the differentiation of testicular germ cell tumors, being expressed in all yolk sac tumors but not in seminomas. GPC3 expression has also been identified in some squamous cell carcinomas of the lung and clear cell carcinomas of the ovary.

Basic Information

Description

Recombinant Human Glypican-3/GPC3 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Gln25-His559) of human Glypican 3 (Accession #NP_004475.1) fused with a 6xHis tag at the C-terminus.

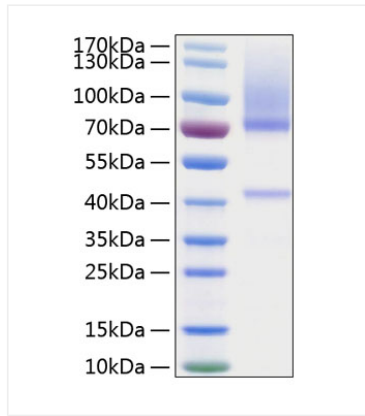
Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Human FGF2 at 0.5 μg/mL (100 μL/well) can bind Human GPC3 with a linear range of 7-20 ng/mL.

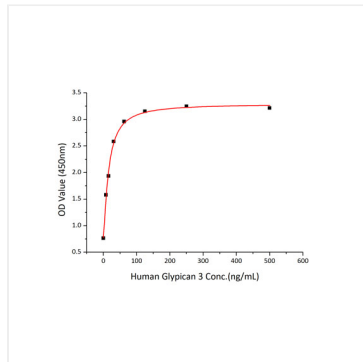
Storage

Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human Glypican-3/GPC3 Protein was determined by SDS-PAGE with Coomassie Blue, showing bands at 40-44&66-115kDa.



Immobilized Human FGF2 at 0.5 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Human GPC3 with a linear range of 7-20ng/mL.