Human Glypican 5 / GPC5 Protein (His Tag)

Catalog Number: **10079-H08B**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

A230034F01Rik

Protein Construction:

A DNA sequence encoding the human GPC5 (NP_004457.1) (Met 1-Thr 554) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA.
Immobilized human GPC5 at 5 μg/ml (100 μl/well) can bind human bFGF with a linear ranger of 0.156-2.5 ng/ml.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Glu 25

Molecular Mass:

The secreted recombinant human GPC5 consists of 540 amino acids and predicts a molecular mass of 60.5 kDa as estimated in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

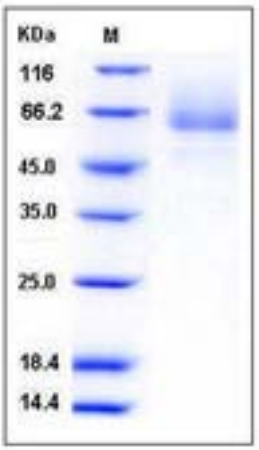
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Glypican-5 (GPC5), is a cell membrane protein which belongs to the glypican family. The glypicans compose a family of glycosylphosphatidylinositol-anchored heparan sulfate proteoglycans that may play a role in the control of cell division and growth regulation. So far, six members (Glypican-1/GPC1, Glypican-2/GPC2, Glypican-3/GPC3, Glypican-4/GPC4, Glypican-5/GPC5, Glypican-6/GPC6) of this family are known in vertebrates. In adult, Glypican-5 is primarily expressed in the brain. It is also detected in fetal brain, lung and liver. Glypican-5 enhances the intracellular signaling of FGF2 and HGF. It alters the cellular distribution of FGF2. The properties of Glypican-5 make it an attractive target for therapeutic intervention in rhabdomyosarcomas and other tumors that amplify and/or overexpress its gene. Glypican-5 is over-expressed in lymphoma cell lines that had shown amplification. It is a likely target for amplification, and that over-expression of GPC5 may contribute to development and/or progression of lymphomas and other tumors.

References

1. Yu W, et al. (2003) GPC5 is a possible target for the 13q31-q32 amplification detected in lymphoma cell lines. J Hum Genet. 48(6): 331-5.
2. Williamson D, et al. (2007) Role for amplification and expression of glypican-5 in rhabdomyosarcoma. Cancer Res. 67(1): 57-65.