

Human GPC3/Glypican 3 Protein

Cat. No. GPC-HM131



Description

Source	Recombinant Human GPC3/Glypican 3 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln25-His559.
Accession	P51654-1
Molecular Weight	The protein has a predicted MW of 61.6 kDa. Due to furin-like convertase cleavage site and glycosylation, the protein migrates to 42 kDa, 70-115 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 24 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Glypican-3 is a protein, which is encoded by the GPC3 gene in humans. The protein core of GPC3 consists of two subunits, where the N-terminal subunit has a size of ~40 kDa and the C-terminal subunit is ~30 kDa. Glypican 3 is a potential therapeutic target for treating liver cancer and other cancers. Several therapeutic anti-GPC3 antibodies have been developed.

Assay Data

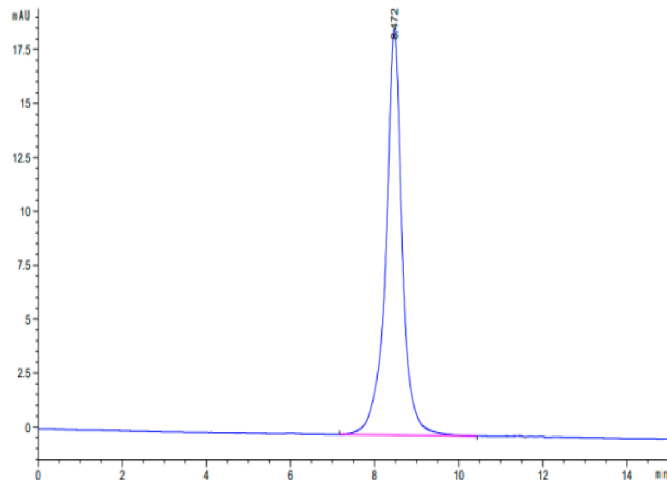
Bis-Tris PAGE



Human GPC3 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

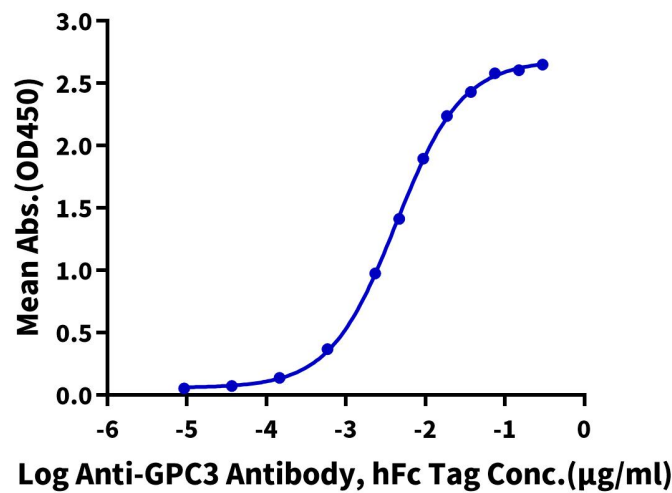
Assay Data



The purity of Human GPC3 is greater than 95% as determined by SEC-HPLC.

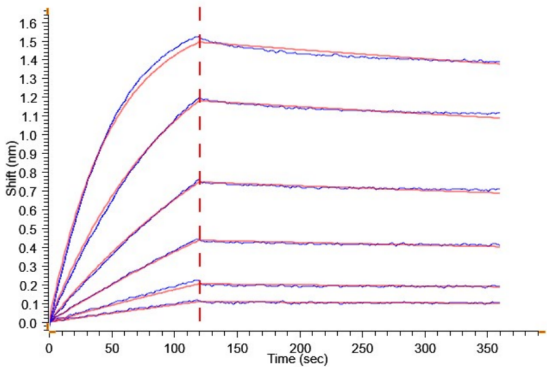
ELISA Data

Human GPC3, His Tag ELISA
0.1 µg Human GPC3, His Tag Per Well



Immobilized Human GPC3, His Tag at 1 µg/ml (100µl/Well). Dose response curve for Anti-GPC3 Antibody, hFc Tag with the EC50 of 4.3ng/ml determined by ELISA (QC Test).

BLI Data



Loaded Anti-GPC3 Antibody, hFc-Avi Tag on ProA-Biosensor can bind Human GPC3, His Tag with an affinity constant of 1.72 nM as determined in BLI assay (Gator® Prime).