

# Human GPC3/Glypican 3 Protein, Ultra Low Endotoxin

Cat. No. GPC-HM131-UL

## Description

<b>Source</b>	Recombinant Human GPC3/Glypican 3 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln25-His559.
<b>Accession</b>	P51654-1
<b>Molecular Weight</b>	The protein has a predicted MW of 61.6 kDa. Due to furin-like convertase cleavage site and glycosylation, the protein migrates to 30-31 kDa, 38-42 kDa and 65-80 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-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

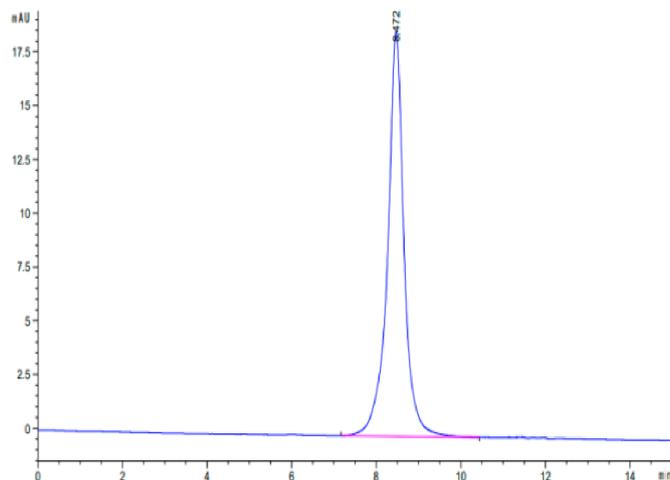
### Bis-Tris PAGE



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

### SEC-HPLC

**Assay Data**

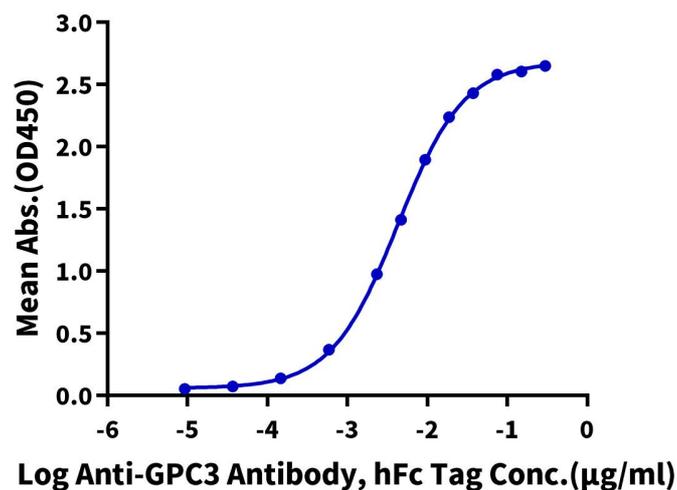


The purity of Human GPC3 is greater than 95% as determined by SEC-HPLC.

**ELISA Data**

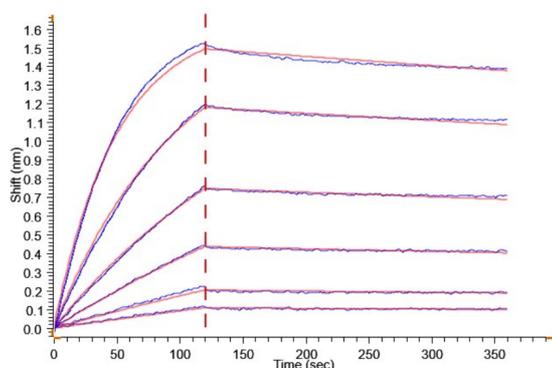
**Human GPC3, His Tag ELISA**

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 .