

Human Glypican 1/GPC1 Protein

Cat. No. GPC-HM111

Description

Source	Recombinant Human Glypican 1/GPC1 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Asp24-Ser530.
Accession	P35052-1
Molecular Weight	The protein has a predicted MW of 57.1 kDa. Due to glycosylation, the protein migrates to 70-135 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU 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 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 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

CAR-T cells targeting glypican-1 (GPC1)-specific human and murine CAR-T cells generated from our original anti-human/mouse GPC1 antibody showed strong antitumor effects in xenogeneic and syngeneic mouse models, respectively. Importantly, the murine CAR-T cells enhanced endogenous T cell responses against a non-GPC1 tumor antigen through the mechanism of antigen-spreading and showed synergistic antitumor effects with anti-PD-1 antibody without any adverse effects in syngeneic models.

Assay Data

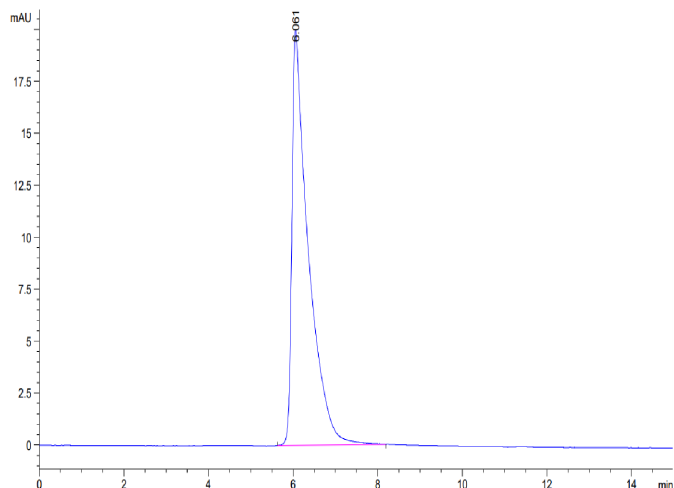
Bis-Tris PAGE



Human Glypican 1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

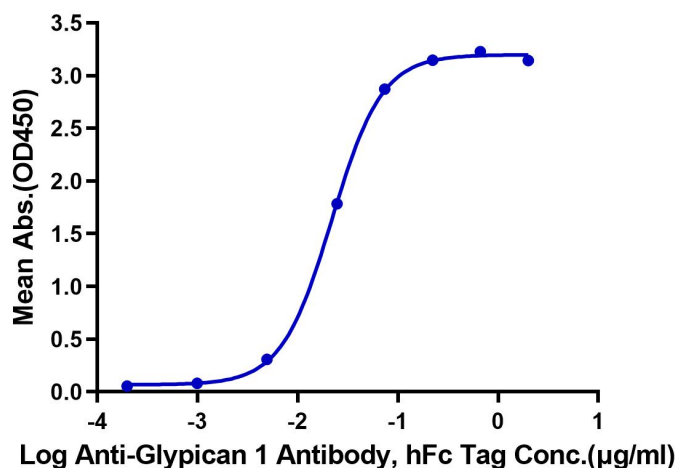


The purity of Human Glypican 1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human Glypican 1, His Tag ELISA

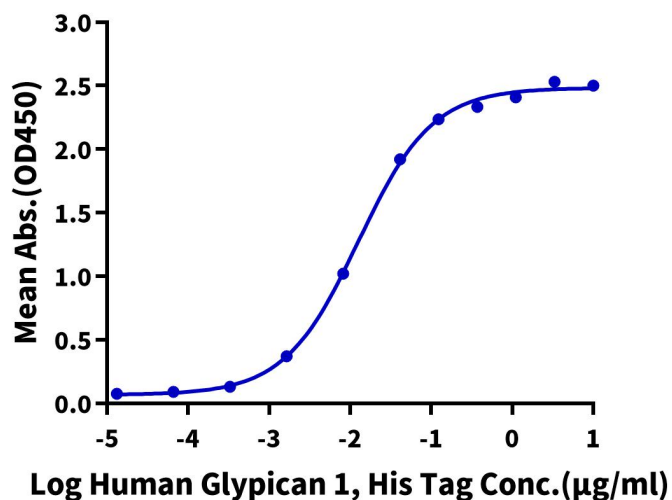
0.05µg Human Glypican 1, His Tag Per Well



Immobilized Human Glypican 1, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-Glypican 1 Antibody, hFc Tag with the EC50 of 21.9ng/ml determined by ELISA (QC Test).

Human Glypican 1, His Tag ELISA

0.05µg Human FGF basic, No Tag Per Well



Immobilized Human FGF basic at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human Glypican 1, His Tag with the EC50 of 12.6ng/ml determined by ELISA.