

Synonym

Glypican 2, GPC2

Source

Human Glypican 2, Fc Tag (GP2-H5255) is expressed from human 293 cells (HEK293). It contains AA Ser 24 - Ser 553 (Accession # [Q8N158-1](#)).

Molecular Characterization

Glypican 2(Ser 24 - Ser 553) Q8N158-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus. The protein has a calculated MW of 84.6 kDa. The protein migrates as 120k Da under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

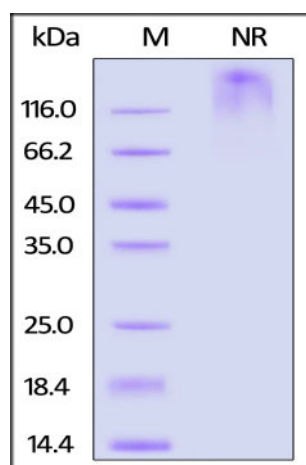
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

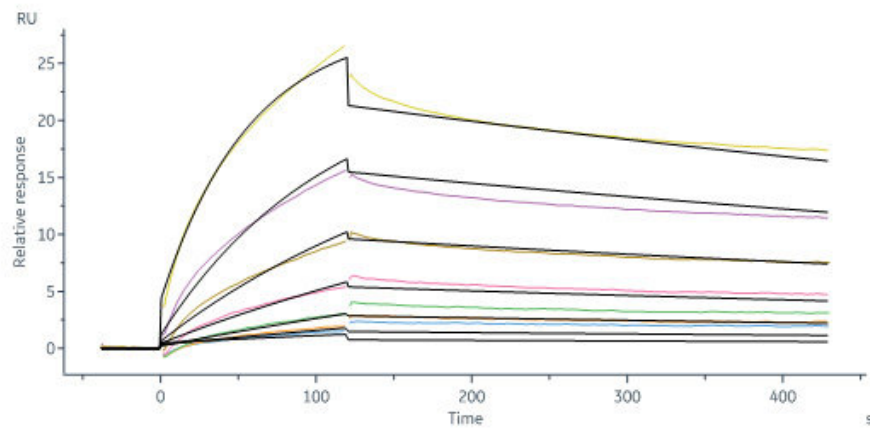
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

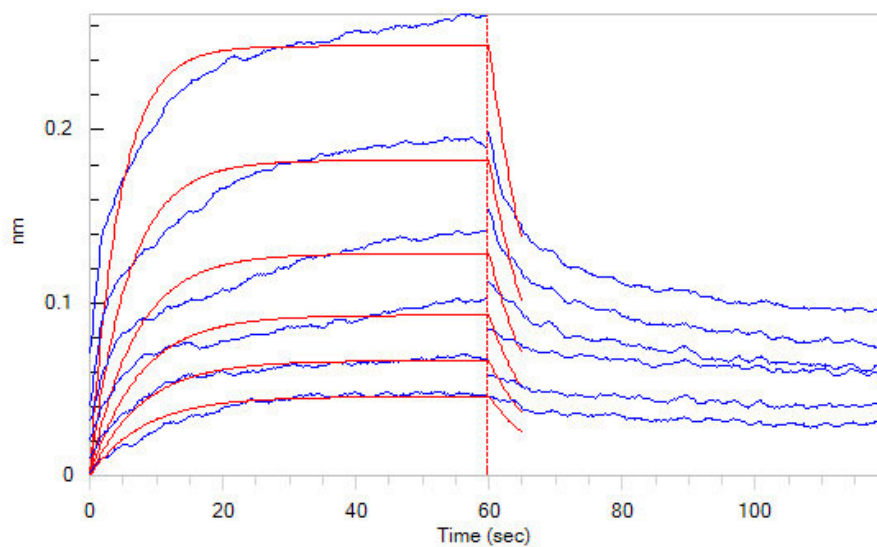
Human Glypican 2, Fc Tag on SDS-PAGE under non-reducing (NR) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-SPR



Human FGF acidic, Tag Free (Cat. No. AFF-H4116) immobilized on CM5 Chip can bind Human Glypican 2, Fc Tag (Cat. No. GP2-H5255) with an affinity constant of 20.1 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Bioactivity-BLI



Loaded Human Glypican 2, Fc Tag (Cat. No. GP2-H5255) on Protein A Biosensor, can bind Human FGF basic, Tag Free (Cat. No. BFF-H4117) with an affinity constant of 0.3 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Glypican 2 (GPC2), also known cerebroglycan, is a glycosphosphatidylinositol-linked integral membrane heparan sulfate proteoglycan found in the developing nervous system. Cerebroglycan participates in cell adhesion and is thought to regulate the growth and guidance of axons. Cerebroglycan has especially high affinity for laminin-1. GPC2 silencing inactivates Wnt/ β -catenin signaling and reduces the expression of N-Myc, an oncogenic driver of neuroblastoma tumorigenesis. Immunotoxins and chimeric antigen receptor (CAR) T cells targeting GPC2 inhibit neuroblastoma growth in mouse models. A GPC3 specific antibody drug conjugate (ADC) can also inhibit neuroblastoma cell proliferation.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.