

Synonym

Glypican 2, GPC2

Source

Rhesus macaque Glypican 2, His Tag (GP2-R52H9) is expressed from human 293 cells (HEK293). It contains AA Ser 24 - Ser 552 (Accession # XP_001103286).

Predicted N-terminus: Gly

Molecular Characterization

Glypican 2(Ser 24 - Ser 552)
XP_001103286 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 59.9 kDa. The protein migrates as 55-95 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

EndotoxinLess 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 PBS, pH7.4. 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.

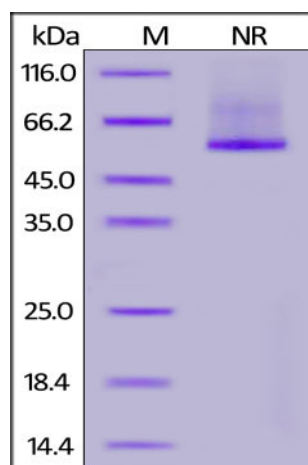
Storage

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

Please avoid repeated freeze-thaw cycles.

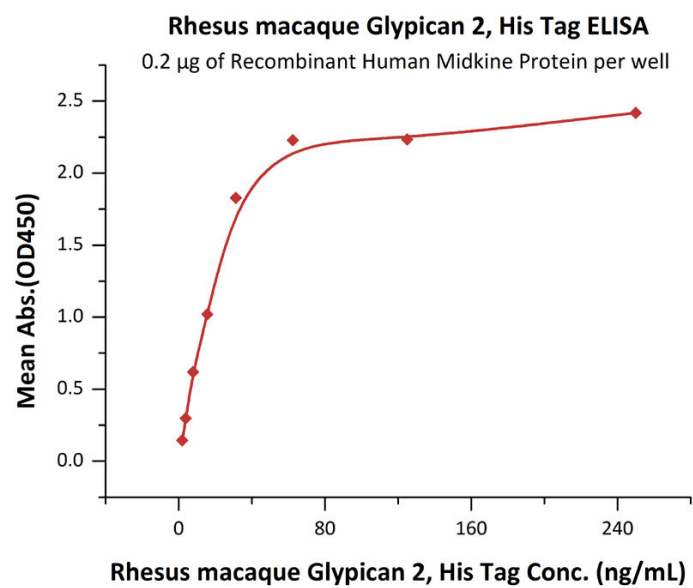
This product is stable after storage at:

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

SDS-PAGE

Rhesus macaque Glypican 2, His 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-ELISA



Immobilized Recombinant Human Midkine Protein at 2 µg/mL (100 µL/well) can bind Rhesus macaque Glypican 2, His Tag (Cat. No. [GP2-R52H9](#)) with a linear range of 2-31 ng/mL (QC tested).

Background

Glypican 2 (GPC2), also known as cerebroglycan, is a glycosaminoglycan-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.

References

- (1) [Herndon ME, et al. 1999. Glycobiology. 9\(2\):143-55.](#)
- (2) [Li N, et al. 2017. Proc Natl Acad Sci U S A. 114\(32\):E6623-E6631.](#)
- (3) [Bosse KR, et al. 2017. Cancer Cell. 32\(3\):295-309.](#)

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