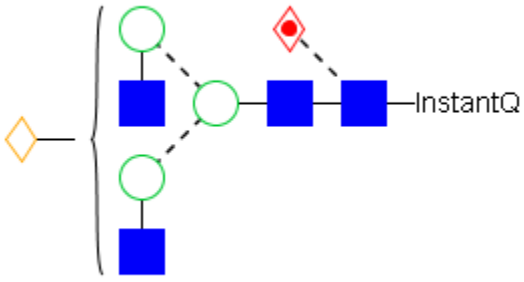
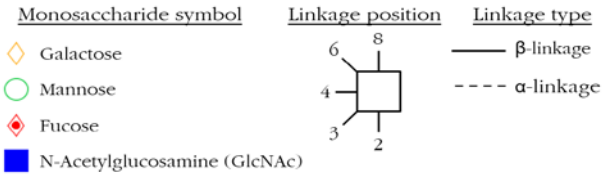
CERTIFICATE OF ANALYSIS

PRODUCT NAME:	GLYKO® INSTANTQ ™ NA2G1F (G1F)
PRODUCT CODE:	GKSQ-316
GLYCAN NAME:	Asialo-, monogalactosylated biantennary complex N-glycan, core-substituted with fucose (NA2G1F)
LOT NUMBER:	DP17D2013
PACK SIZE:	~60 injections (qualitative standard for glycan identification)
FORM:	Dry solid
STORAGE:	Store at -20°C in the dark. The glycan may be stored on the Gly-Q™ instrument at room temperature for up to 18 hours without significant impact on performance (cap securely and return to -20°C for longer term storage).
EXPIRATION:	August 2019 (extended from prior exp. date based on re-assay)
RE-ASSAY DATE:	August 2018
STRUCTURE:	The reducing terminus of the glycan is derivatized with the fluorescent dye, InstantQ.



Structure Key[1,2]:



3832 Bay Center Place
Hayward, CA 94545-3619

TOLL FREE (800) 457-9444
PHONE (510) 638-6900
FAX (510) 638-6919

info@prozyme.com
www.prozyme.com

ProZyme, Glyko, Gly-Q and InstantQ are trademarks or registered trademarks of ProZyme, Inc. in the United States and other countries.

Quality Control:

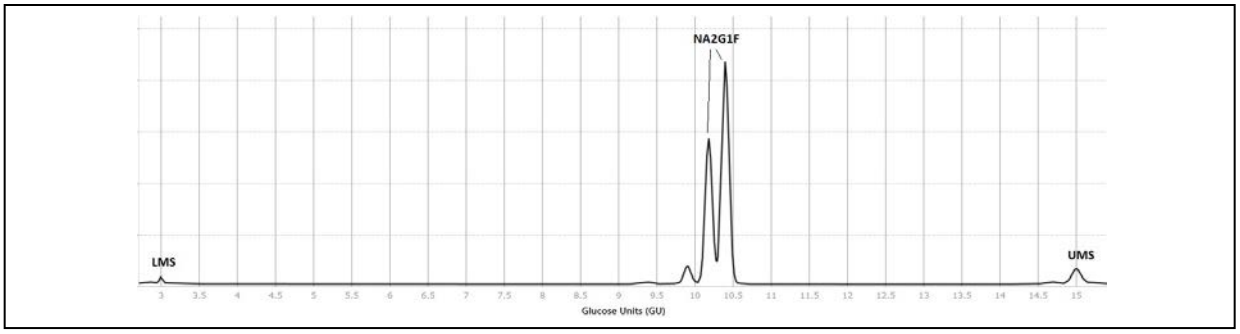


Figure 1 – Gly-*Q* Results: The InstantQ-labeled standard is injected onto a Gly-Q CE Instrument (GQ2000) under the conditions and method below (see Directions for Use for recommended amounts). Gly-Q Migration Standards (GKSQ-500) are co-injected with the glycan:

METHOD:

Action	High Voltage	Duration, seconds	Position	Sampling Interval, Seconds
High Voltage Purge	4.00	10.00	Wash	0.04
Pause		2.00	Clean	
Reagent Block Injection	2.00	2.00	MA02	0.04
Pause		2.00	Clean	
Well Plate Injection	2.00	2.00	Sample	0.04
Pause		2.00	Clean	
Separation & Detection	10.00	120.00	Separation	0.04

Structural Analysis: The purity and structural integrity of the glycan standard was assessed by capillary electrophoresis (CE).

Application: Qualitative reference standard for the separation and identification of N-glycan structures labeled with InstantQ™ on the Gly-Q CE system.

Handling: The labeled oligosaccharide standard is shipped as a dried solid from a solution of 50 µ*M* Sodium Chloride, 50 m*M* Trehalose. Use ultra-pure water or an aqueous buffer to dissolve the material (see Directions for Use for suggested volumes).

Allow the unopened vial to reach ambient temperature and tap on a solid surface to ensure that most of the material is at the bottom of the vial.

Gently remove the cap, add the desired volume of ultra-pure water or aqueous buffer, re-cap and mix thoroughly to redissolve all the material.

For maximal recovery, ensure that the cap lining is also rinsed. Centrifuge the reconstituted vial briefly before use.

Make sure that any glassware, plasticware, solvents or reagents used are free of glycosidases and carbohydrate contaminants.

Minimize exposure to elevated temperatures or extremes of pH.

Aliquot out the desired quantity and return remaining solution to -20°C. The glycan may undergo up to four freeze-thaws without significant effect on performance.

Directions For Use: The amount of labeled glycan used with the Gly-Q Instrument is typically 50 µl. For our Quality Control testing, the standard was reconstituted in 100 µl water, a 50 µl aliquot was transferred to a PCR tube, and replicate runs were processed. Typically, ~30 injections are obtained from a 50 µl aliquot; aliquots of less than 50 µl are not recommended. Signal decrease can occur over repeated injections from the same aliquot.

For further information on using InstantQ labeled glycans with the Gly-Q system, please contact ProZyme:

info@prozyme.com

REFERENCES

1. Ceroni A, Maass K, Geyer H, Geyer R, Dell A, Haslam SM. GlycoWorkbench: a tool for the computer-assisted annotation of mass spectra of glycans. J Proteome Res. 2008 Apr; 7(4): 1650-9.

2. Harvey DJ, Merry AH, Royle L, Campbell MP, Dwek RA, Rudd PM. Proposal for a standard system for drawing structural diagrams of N– and O-linked carbohydrates and related compounds. Proteomics 2009 Aug; 9(15): 3796-801.

Digitally signed by Shiva Pourkaveh
Date: 2018.09.10 12:43:38 -07'00'

Authorized Signature