

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Gly-Q Migration Standards

PRODUCT CODE: GKSQ-500

LOT NUMBER: DP18K0802a

PACK SIZE: 100 μl (qualitative standard for glycan identification)

FORM: Aqueous solution with 250 μM NaCl

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: May 2020

STRUCTURE: The Gly-Q Migration Standards consists of a mixture of maltotriose (DP3) and

maltopentadecaose (DP15) which are each labeled with a fluorescent dye for

separation and detection on the Gly-Q system.

Quality Control:

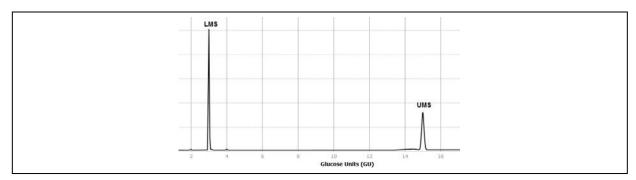


Figure 1 – Gly-Q Results: The Gly-Q labeled standard is injected onto a Gly-Q CE Instrument (GQ2000) under the conditions and method below:

METHOD:

| Action | High Voltage | Duration, seconds | Position | Sampling Interval, Seconds |
|------------------------|--------------|-------------------|------------|-------------------------------|
| High Voltage Purge | 4.00 | 10.00 | Wash | 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: To align multiple sample runs and generate relative migration times on the Gly-Q CE system, which are subsequently converted to GU values using a labeled GU Ladder (GKSQ-503).

Handling: The labeled oligosaccharide standard is shipped in solution (100 μ l). Allow the unopened vial to reach ambient temperature and centrifuge the vial briefly before use. Aliquot out the desired quantity (see Directions for Use) and return remaining solution to -20°C. The glycan may undergo up to four freeze-thaws without significant effect on performance.

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.

Directions For Use: The amount of labeled Migration Standard used with the Gly-Q Instrument is typically 100 μ l. For our Quality Control testing, an aliquot was transferred to a PCR tube and replicate runs were processed. Typically, ~100 injections are obtained from a 100 μ l aliquot; for fewer runs, a smaller aliquot of the standard may be dispensed and used on the instrument (not less than 50 μ l). Signal decrease can occur over repeated injections from the same aliquot.

For further information on Gly-Q methods, please contact ProZyme:

info@prozyme.com

Authorized Signature