DS-02 Matrix Standard Kit (Dye Set E5) for the 310 Genetic Analyzer

Catalog Numbers 4323050

Pub. No. 4340083 Rev. B

WARNING! Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from **thermofisher.com/support**.

Product description

The Matrix Standard Set DS-02 is used for spectral calibration to generate the "multi-component matrix" required before analyzing fragments labeled with dR110[™], dR6G[™], dTAMRA[™], dROX[™], and LIZ[™] dyes on the 310 Genetic Analyzer.

Matrix standards do not need to be run with every set of sample injections. A set of five matrix standards only needs to be run once in order to generate a matrix file which is then applied to samples run under similar conditions.

Contents and storage

Contents ^[1]	Amount	Storage ^[2]
dR110™ Matrix Standard	1 tube	Store at 2–8°C, protected from light. Do not freeze.
dR6G [™] Matrix Standard	1 tube	
dTAMRA [™] Matrix Standard	1 tube	
dROX [™] Matrix Standard	1 tube	
LIZ [™] Matrix Standard	1 tube	

[1] Each matrix standard contains a mixture of DNA fragments of specific sizes, each labeled with a unique fluorescent dye.

^[2] The standards are stable for one year when stored at 2–8°C.

Guidelines for use

- For more information on the use of matrix standards, see the instrument User Guide or Getting Started Guide.
- IMPORTANT! Thoroughly mix the contents of the DS-02 Matrix Standard tube, then briefly centrifuge before use.
- To prepare the matrix standard dilution, combine the appropriate volumes of matrix standard and Hi-Di[™] Formamide (Cat. No. 4311320). Dilution volumes vary depending on the specific application and instrument.
- Do not prepare the matrix standard more than 2 hours in advance.
- IMPORTANT! Discard any unused reagent that has been diluted in Hi-Di[™] Formamide.

Prepare the standards for the 310 Genetic Analyzer

1. Combine the following components for each Matrix Standard:

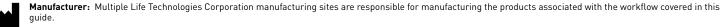
Component	Volume per standard
Matrix Standard	1 µL
Hi-Di [™] Formamide	12 µL
Total volume	13 µL



- 2. Mix thoroughly, then centrifuge to bring the mixture to the bottom of the tubes and to eliminate air bubbles.
- 3. To denature the DNA fragments, incubate at 95°C for 5 minutes. Immediately place the mixture on ice.
- 4. Load each five-color matrix standard in a separate injection.
- 5. Open the GeneScan[™] injection list in the 310 Genetic Analyzer Data Collection Software.
- 6. Import the 5-dye sample sheet, then select Run Module GS STR POP4 (1 mL) E5.
- **7.** Start the sample run.

Limited product warranty

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Revision history: Pub. No. 4340083

Revision	Date	Description
В	22 December 2017	Updated and rebranded.
A	17 December 2002	New document.

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