

BigDye® Terminator v3.1 Matrix Standard (Dye Set Z) 3130, 3100 and 3500 Series Genetic Analyzers

Product P/N 4336974
Insert P/N 4363117 REV B
Printed in USA



For Research Use Only.
Not for use in diagnostic procedures.

Product Description:

This matrix standard is used to generate the "multicomponent matrix" required when analyzing BigDye® Terminator v3.1 labeled DNA fragments on the Applied Biosystems 3130, 3100 and 3500 Series Genetic Analyzers. The Data Collection software uses the "multicomponent matrix" to automatically analyze four different colored fluorescent dye labeled DNA fragments in a single capillary. The matrix standard contains four DNA fragments labeled with four different colors and is diluted in 1X TE buffer.

Storage Conditions:

Store the kit at 2°C to 8°C until ready to use. Do not freeze this product.

Shelf life:

The kit is stable for 6 months when stored at 2°C to 8°C protected from light.

Instructions for use:

Preparing the Matrix Standard for the Applied Biosystems 3130 / 3100 / 3500 Series Genetic Analyzers:

1. Thoroughly mix the contents of one Matrix Standard tube and spin briefly in a microcentrifuge.
2. Dilute the Matrix Standard tube with Hi-Di™ Formamide (P/N 4311320 or P/N 4440753) in a 1.5 mL microcentrifuge tube. Use the dilution volumes provided in Table 1, Table 2, or Table 3.

Table 1: 3100/3130 Series (16 capillary)

Array Length	Volume of v3.1 Matrix Standard	Volume of Hi-Di™ Formamide	Dilution
50 cm	5 µL	195 µL	1:40
36 cm	10 µL	190 µL	1:20
80 cm	10 µL	190 µL	1:20

Table 2: 3100/3130 Series (4 capillary)

Array Length	Volume of v3.1 Matrix Standard	Volume of Hi-Di™ Formamide	Dilution
50 cm	2.5 µL	97.5 µL	1:40
36 cm	2.5 µL	47.5 µL	1:20
80 cm	2.5 µL	47.5 µL	1:20

Table 3: 3500 Series (8 and 24 capillary)

Array Length	Volume of v3.1 Matrix Standard	Volume of Hi-Di™ Formamide	Dilution
50 cm	12 µL	238 µL	~ 1:20
36 cm	12 µL	238 µL	~ 1:20

3. Mix thoroughly and spin briefly in a microcentrifuge.
4. Denature at 95°C for 2 minutes and place immediately on ice.

- For a 16 or 4 capillary instrument: Dispense 10 μ L into two columns (16 capillaries) or 4 wells (half a column) of a 96-well or 384-well microtiter plate.
 - For the 8 or 24 capillary instrument: Dispense 10 μ L into one or three columns (8 or 24 caps) of a 96-well microtiter plate, or 5 μ L of the mixture into one or three columns (8 or 24 caps) of a 384-well microtiter plate.
 - For specifics on setting up a plate, refer to the appropriate Applied Biosystems instrument user guide.
5. Briefly spin plate to ensure there are no air bubbles in the bottom of the wells.
 6. Refer to your User Guide or Getting Start Guide for information on running samples.

NOTE: Discard any unused reagent that has been diluted in Hi-Di™ Formamide.

Safety warning:

Please read safety data sheets for further details.

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