

# BigDye™ Terminator v3.1 Matrix Standard Kit 3130 and 3100 Series Systems

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

Matrix Standard is used to generate the "multicomponent matrix" required when analyzing BigDye® Terminator v3.1 labeled DNA fragments on the Applied Biosystems 3130 and 3100 Series Systems. 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.\* This standard is diluted in 1X TE buffer and is stable for 6 months when stored at 2°C to 8°C protected from light.

Preparing the Matrix Standard for the Applied Biosystems 3130 and 3100 Series Systems:

**WARNING! CHEMICAL HAZARD. Hi-Di™ Formamide.** Exposure causes eye, skin, and respiratory tract irritation. It is a possible developmental and birth defect hazard. Read the MSDS, and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

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) in a 1.5 mL microcentrifuge tube. Use the dilution volumes provided in Table 1 or Table 2.

**Table 1. For 16 capillaries:**

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. For 4 capillaries**

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

3. Mix thoroughly and spin briefly in a microcentrifuge.
4. Denature at 95°C for 2 minutes and dispense 10 µL of reagent into wells A1-H2 (16 capillaries) or A1-D1 (4 capillaries) of a GeneAmp® 96-Well microtiter plate.
5. Briefly spin plate to ensure there are no air bubbles in the bottom of the wells.
6. Place the 96-Well microtiter plate onto the autosampler.
7. Refer to your User's Manual or Getting Started Guide for information on running samples.

\* Patents pending

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

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