Product Number
4000-20H

Storage: -20 °C

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Updates available at:
http://biosupport.licor.com

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M13 Forward (-29) IRDye® 800 Value Pack

For LI-COR DNA Analysis Systems

Dilution Procedure

Add 200 µl of sterile, ice-cold 1XTE Buffer to the lyophilized primer, to give a stock solution of 100 µM. A tube of sterile 1XTE Buffer is included with your primer order. Mix well until all of the primer is dissolved (undissolved primer should be easily visible as a dark green pellet.)

A 1:100 dilution of this stock solution with 1XTE Buffer will produce a 1.0 µM working solution (additional 1XTE Buffer is required). Aliquot both the stock solution (100 µM) and the working solutions (1.0 µM) into several sterile microcentrifuge tubes, and store them at -20°C.

1XTE Buffer Solution

The 1XTE included with the primer is 10 mM Tris, 1 mM EDTA, pH = 7.4 (± .2). Additional 1XTE can be made by diluting 10 µl of 100XTE Buffer (Sigma Chemical Company, Catalog #T9285) to a 1 mL total volume with sterile distilled water. Store at 4°C.

Measuring Concentration

The concentration of the primer solution may be verified by measurement of a dilution of the final solution on a UV/Vis absorption spectrophotometer equipped with a microcell. Since EDTA interferes with measurement of absorbance at 260 nm, the concentration should be determined based on the IRDye 800 peak at 795 nm. The molar absorptivity of IRDye 800 at 795 nm in aqueous solution is 270,000. The concentration may be calculated using the following formula:

(Absorbance (at 795 nm) × Dilution Factor) /
(270,000 × Cell path length (cm)) = Molar concentration of the original solution

Example: If, using a 1 cm path length cuvette, the absorbance at 795 nm equals 0.15 for a 1:2 dilution of the final primer solution, the concentration of the original solution can be determined as follows:

$$(0.15 \times 2) / (270{,}000 \times 1) = 1.1 \times 10^{-6}\ \text{M} = 1.1\ \mu\text{M}$$

Storage Conditions

Minimize exposure to light. Store tubes at -20°C in a light-tight container or foil shipping bag. Minimizing freeze/thaw cycles may help preserve the integrity of the fluorescent primer.

Sequence: 5'–CAC GAC GTT GTA AAA CGA C–3'

Tm: 58.1°C

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