5'-BlackBerry[®] Quencher 650 CEP (5'-BBQ-650[®] CEP) Product No. BL 1020

Product Information

Standard synthesis protocols may be employed. 5'-BBQ-650® CEP is not very soluble in acetonitrile and should be dissolved in one part of anhydrous dichloromethane and then diluted with one part of anhydrous acetonitrile to achieve the standard dilution recommended by the instrument manufacturer. It is important to dissolve the phosphoramidite in dichloromethane first; do not premix the two solvents. Coupling is achieved in high yield using standard protocols and coupling times. We recommend mild nucleobase deprotection with ammonium hydroxide or AMA at 65 °C for 10 minutes to avoid degradation of the quencher.

The lipophilicity of the BBQ-650® moiety may require the use of relatively high concentrations of the organic mobile phase in RP-HPLC purifications, especially with shorter oligonucleotides.

For quantification, the following extinction coefficients may be useful, which were determined using a simple BBQ-650[®] chromophore (i.e., no oligonucleotide): At 598 nm in methanol, $\varepsilon = 40,667 \text{ M}^{-1}\text{cm}^{-1}$; at 260 nm in methanol, $\varepsilon = 15,077 \text{ M}^{-1}\text{cm}^{-1}$.