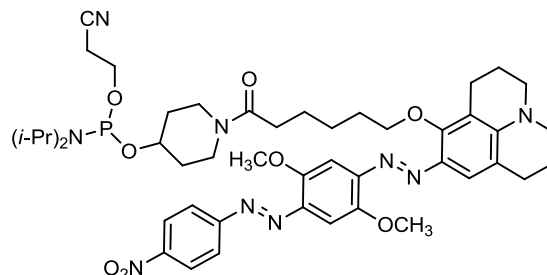


5'-BBQ-650® CEP II
Product No. BL 1022
Product Information



$C_{46}H_{62}N_9O_8P$
Mol. Wt.: 899.45

For installation of a BlackBerry® quencher at the 5'-terminus of an oligonucleotide.

5'-BBQ-650 CEP II is not very soluble in acetonitrile and should be dissolved in one part 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 by shaking for at least 15 minutes; do not premix the two solvents. After shaking, allow the mixture to settle and tip the vial to check for residual solids. Coupling is achieved in high yield using standard protocols. We recommend mild deprotection conditions (65 °C, 10 min) to avoid quencher degradation.

To prevent precipitation and cross contamination, we found it best to flush the instrument with dichloromethane followed by acetonitrile immediately after use of BL 1022.

The lipophilicity of the BBQ 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 chromophore (i.e., no oligonucleotide): At 598 nm in methanol, $\epsilon = 40,667 \text{ M}^{-1}\text{cm}^{-1}$; at 260 nm in methanol, $\epsilon = 15,077 \text{ M}^{-1}\text{cm}^{-1}$.