

SAFC

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# **User Instructions**

# **HEX**<sup>TM</sup>

## **Product Description**

5'-Hexachloro -Fluorescein Phosphoramidite Chemical Formula:  $C_{46}H_{52}Cl_6N_3O_{10}P$ 

Molecular Weight: 1050.61

Storage: -20°C

#### **Product List**

100µmol	
M043180-0.1mmol	HEX™ 0.1mmol, Expedite™ and Polygen®
M043130-0.1mmol	HEX™ 0.1mmol, ABI™ and ÄKTA®

### Method

- 1. Use anhydrous acetonitrile (water content < 30ppm) to dissolve the HEX phosphoramidite. It is important to maintain anhydrous conditions when dissolving the HEX phosphoramidite in acetonitrile.
- For use on Expedite<sup>™</sup> and PolyGen® Synthesizers, add 2.1ml acetonitrile to 0.1mmol HEX phosphoramidite (M043180-0.1mmol) to obtain a concentration of 50mg/ml. For use on ABI<sup>™</sup> and ÄKTA® Synthesizers, add 1.1ml acetonitrile to 0.1mmol HEX phosphoramidite (M043130-0.1mmol) to obtain a concentration of 100mg/ml.
- 3. Gently swirl the vial until the powder is completely dissolved.
- 4. Once the HEX phosphoramidite has been dissolved and placed on your instrument, it should be used within 48 hours. If you do not plan to use all of the material in 48 hours, remove the vial, seal carefully and store at -20°C until needed.
- 5. Attach the dissolved phosphoramidite to the appropriate position on the synthesizer. Ensure that the delivery line to the synthesis chamber is sufficiently primed.
- 6. Enter the sequence of the oligonucleotide you wish to synthesize with HEX phosphoramidite at the 5'-end. For HEX phosphoramidite a coupling time of 3 minutes is recommended.
- 7. Proceed as you would with a standard DNA oligonucleotide synthesis. Note that the HEX phosphoramidite does not contain a DMT group. Oligonucleotides do not need to be detritylated at the end of the synthesis. Note that HEX phosphoramidite will terminate the synthesis and can only be employed in the last coupling step on the 5' terminus.
- 8. Cleave and deprotect the oligonucleotide with ammonia at room temperature for 24 hours with standard protected nucleobases, or, if TAC-protected phosphoramidites are used, at room temperature for 2 hours.

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9. The oligonucleotide is now ready for further processing, such as desalting or purification with RP-HPLC, AX-HPLC or gel-based methods.9. The oligonucleotide is now ready for further processing, such as desalting or purification with RP-HPLC, AX-HPLC or gel-based methods.

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