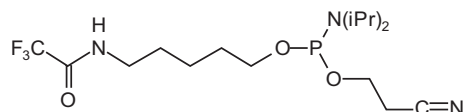


User Instructions

# TFA-Amino Linker Phosphoramidite



**Trifluoroacetyl-Aminopentanol-β-Cyanoethylphosphoramidite**

## Product Description

Chemical Formula: C<sub>16</sub>H<sub>29</sub>F<sub>3</sub>N<sub>3</sub>O<sub>3</sub>P

Formula Weight: 399.4

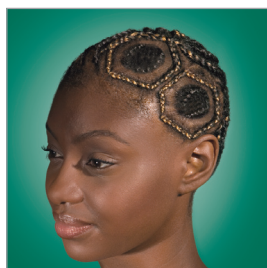
Storage: -20°C

## Product List

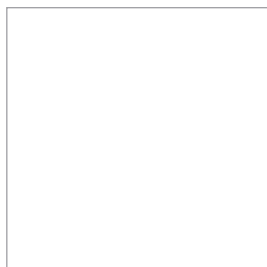
M010682-01	0.25g PE™ 8900 and Polygen™ compatible
M010632-01	0.25g ABI™ compatible

## Method

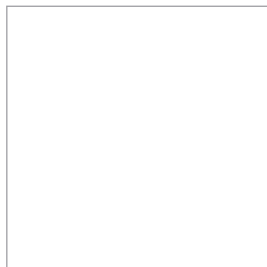
- Use anhydrous acetonitrile (water content < 30ppm) to dissolve the TFA-amino linker phosphoramidite. It is important to maintain anhydrous conditions when dissolving the linker compound in acetonitrile.
- For use on PE™ 8900 instruments, add 5ml acetonitrile to 0.25g TFA-amino linker phosphoramidite (M010682-01) to obtain a concentration of 50 mg/ml. For use on PE 390 series instruments, add 6.3ml acetonitrile to 0.25g TFA-amino linker phosphoramidite (M010632-01) to prepare a 0.1M solution.
- The TFA-amino linker phosphoramidite is a viscous oil that requires more time to dissolve than powdered phosphoramidites. Gently swirl the vial until the linker is completely dissolved.
- Attach the dissolved phosphoramidite to the appropriate position on the synthesizer. Ensure that the delivery line to the synthesis chamber is sufficiently primed.
- Enter the sequence of the oligonucleotide you wish to synthesize with the TFA-amino linker phosphoramidite. The coupling time for the TFA-amino linker phosphoramidite is the same as that recommended by the instrument manufacturer for the four standard DNA phosphoramidites A, C, G and T.  
  
Note that the TFA-amino linker phosphoramidite will terminate the synthesis and can only be employed in the last coupling step on the 5' terminus.
- Proceed as you would with a standard DNA oligonucleotide synthesis using the Trityl-OFF mode.



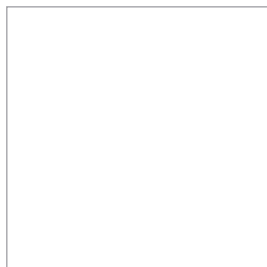
# TFA-Amino Linker Phosphoramidite



7. Treat the CPG-bound oligonucleotide with an excess of a 10% solution of triethylamine in acetonitrile for 10 minutes at room temperature and wash with acetonitrile. This procedure cleaves the cyanoethyl-protective groups from the phosphate moieties of the oligonucleotide and prevents side-reactions arising from the alkylation of the primary amine.



8. Cleave and deprotect the oligonucleotide with ammonia at 55°C for 8 hours with standard protected nucleobases. If the conventional isobutryl (ib) protective group on dG is replaced with the dimethylformamidine (dmf) group, a shorter deprotection time of 2 hours at 55°C may be used.



9. The oligonucleotide is now ready for further processing, such as desalting or purification with RP-HPLC, AX-HPLC or gel-based methods. Note that cartridge-based reverse phase methods are not suitable for oligonucleotides prepared with the TFA-amino linker phosphoramidite.

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