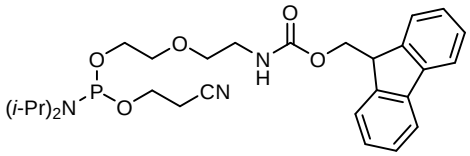
Fmoc-5'-amino-modifier-5 CEP

Product No. BA 0354

Product Information



$C_{28}H_{38}N_3O_5P$
Mol. Wt.: 527.59

The (fluorenylmethyloxy)carbonyl (Fmoc) group has been shown to be useful as an amine protecting group on oligonucleotide amino-modifiers.[1] It can be removed by standard cleave-deprotect protocols such as ammonium hydroxide. Alternatively, the Fmoc group can be selectively removed before cleavage of the oligonucleotide from the solid support,[2] thereby simplifying labeling of the resulting amino group by acylation. After the acylation is complete and excess reagents are washed away, the labeled oligonucleotide is cleaved from the support and further deprotected with ammonium hydroxide.

Use: For oligonucleotide synthesis, employ acetonitrile diluent at the concentration recommended by the synthesizer manufacturer. Use standard coupling protocols; in our hands, extended coupling times were not required and coupling efficiencies of 99% could be obtained. Cleavage from the solid support may be carried out by standard procedures, and standard nucleobase deprotection conditions may be employed.

References

1. Nelson, P. S.; Kent, M.; Muthini, S. *Nucl. Acids Res.* **1992**, *20*, 6253-6259.
2. (a) Gartner, Z. J.; Kanan, M. W.; Liu, D. R. *J. Am. Chem. Soc*. **2002**, *124*, 10304-10306; see Supporting Information, p. 3. (b) Gartner, Z. J.; Tse, B. N.; Grubina, R.; Doyon, J. B.; Snyder, T. M.; Liu, D. R. *Science 2004*, **305**, 1601-1605; see Supporting Online Material, p. 2.