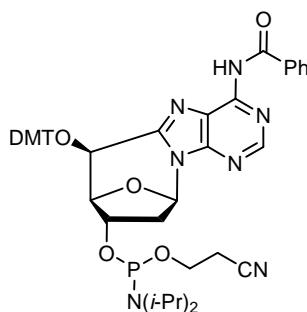


(5'S)-8,5'-Cyclodeoxyadenosine CEP

Product No. BA 0329

Product Information



C₄₇H₅₀N₇O₇P
Mol. Wt.: 855.92

This phosphoramidite is used for standard 3' to 5' oligonucleotide synthesis.

8,5'-Cyclodeoxyadenosine (cyclo-dA) is a naturally occurring free-radical-induced DNA lesion. This bulky lesion has been shown to be present in human cells.¹ Cyclo-dA is a strong block to gene expression in both CHO and human cells but can be repaired *via* nucleoside excision repair mechanisms, but not by base excision repair mechanisms.² Our (5'S)-8,5'-Cyclodeoxyadenosine CEP can be used for efficient incorporation of cyclo-dA into oligonucleotides.

Use: Dissolve the CEP in a solution of one part dichloromethane and 4 parts acetonitrile at concentrations recommended by the synthesizer manufacturer. Coupling should be carried out using standard instrument protocols using a 15 minute coupling time. Cleavage from the solid support can be carried out under standard conditions, and the (5'S)-8,5'-cyclodeoxyadenosine residue is stable to standard deprotection conditions.

(1) Dizdaroglu, M.; Dirksen, M.L.; Jiang, H.X.; Robbins, J.H. *J. Biochem.* **1987**, *241*, 929-932.

(2) Brooks, P.J.; Wise, D.S.; Berry, D.A.; Kosmoski, J.V.; Smerdon, M.J.; Somers, R.L.; Mackie, H.; Spoonde, A.Y.; Ackerman, E.J.; Coleman, K.; Tarone, R.E.; Robbins, J.H. *J. Biol. Chem.* **2000**, *275*, 22355-22362.