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5¢-O-b,g-Methylenetriphosphate Derivatives of Nucleoside


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Comments

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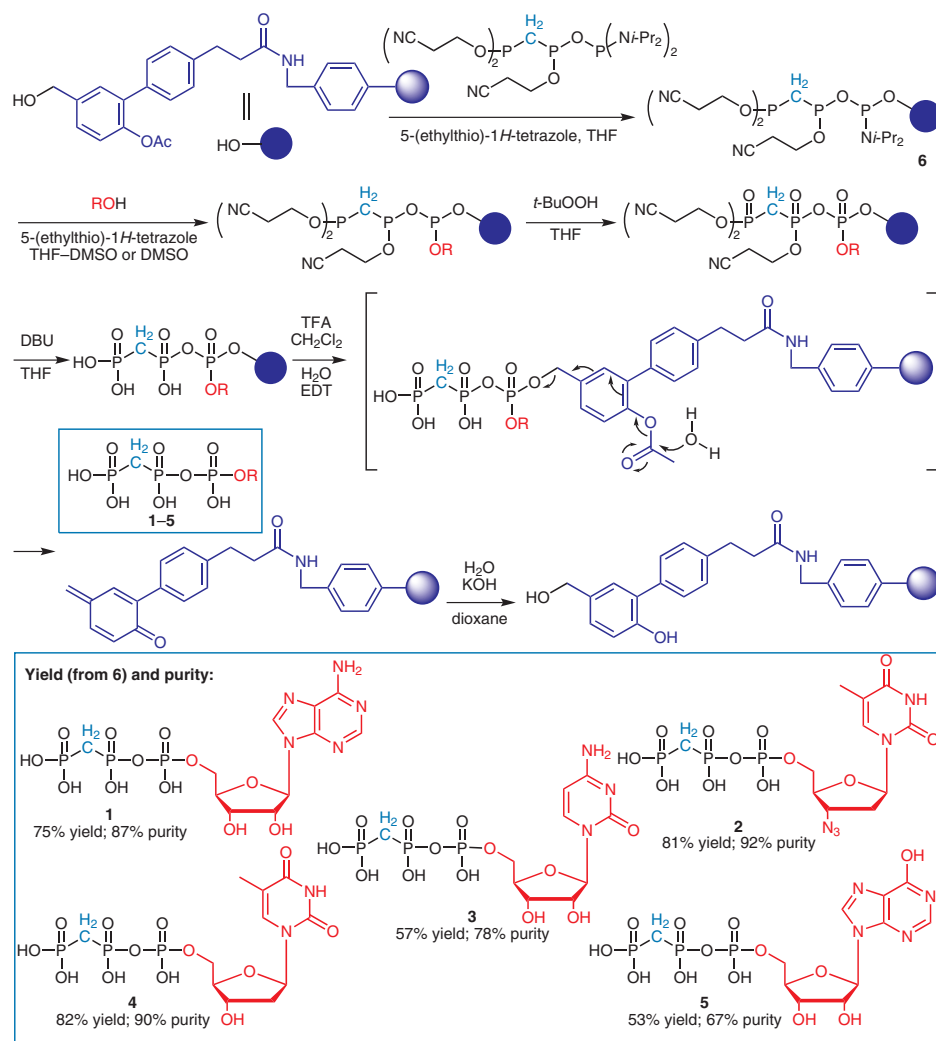
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Solid-Phase Synthesis of 5'-O- β,γ -Methylenetriphosphate Derivatives of Nucleosides and Evaluation of Their Inhibitory Activity Against HIV-1 Reverse Transcriptase

Tetrahedron Lett. **2010**, *51*, 3010-3013.

5'-O- β,γ -Methylenetriphosphate Derivatives of Nucleosides



Significance: The solid-phase synthesis of 5'-O- β,γ -methylenetriphosphates of nucleosides **1–5** is described, where a 4-acetoxy-3-arylbenzyl-oxy group was used as a linker.

Comment: It was found that cytidine triphosphate **3** inhibited completely RNase H activity of HIV-1 reverse transcriptase at 700 μ M.

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Category

Polymer-Supported Synthesis

Key words

5'-O- β,γ -methylenetriphosphates

HIV-1 inhibitory activity

phosphate transfer

isosteric P-CH₂-P bond

RNase H activity

HIV-1 reverse transcriptase

polystyrene resin-bound linkers

4-acetoxybenzyl alcohols