

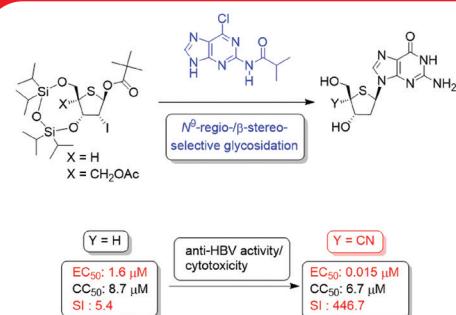
# Synlett

Accounts and Rapid Communications in Chemical Synthesis

April 2, 2024 • Vol. 35, 603–733

## Special Issue

to Celebrate the Centenary Year of  
Prof. Har Gobind Khorana – Advances in the  
Synthesis of Bio-Active Nucleosides, Functional  
Nucleotides and Oligonucleotides  
*Guest Editors: A. Kapdi, Y. S. Sanghvi*



**Regio- and Stereoselective Synthesis of 2'-Deoxy-4'-thioguanine Nucleosides: Evaluation of Anti-Hepatitis B Virus Activity and Cytotoxicity Leading to Improved Selectivity Index by 4'-C-Cyanation**

**H. Kumamoto, S. Imoto, N. Kuwata-Higashi, H. Mitsuya, K. Haraguchi**

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## Recent Advances in the Synthesis of 5-(Hetero)aryl Uracil Derivatives

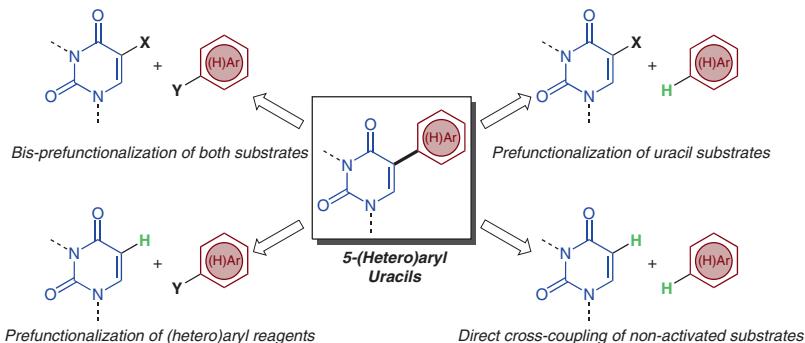
## Cluster Account

603

*Synlett* 2024, 35, 603–615  
DOI: 10.1055/a-2091-1071

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## Current Strategies on the Enantioselective Synthesis of Modified Nucleosides

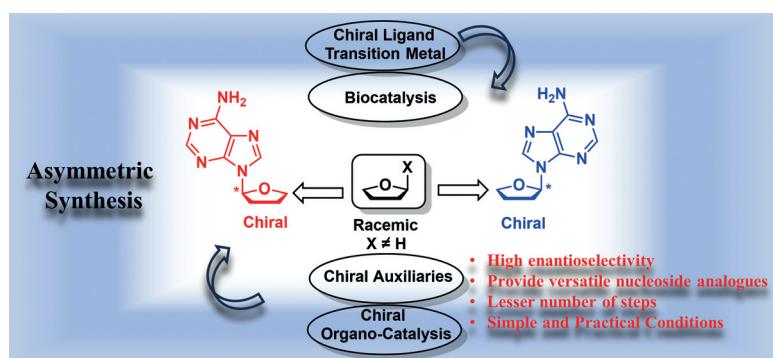
## Cluster Account

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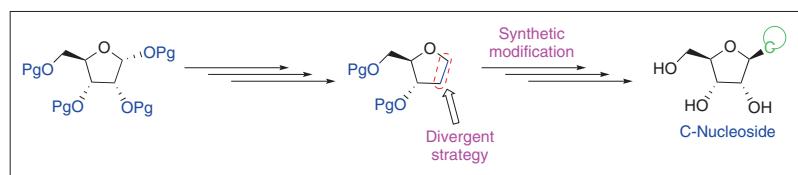
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DOI: 10.1055/a-2212-8502

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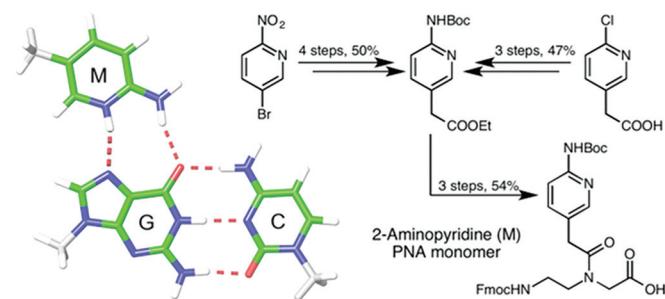


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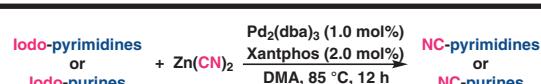
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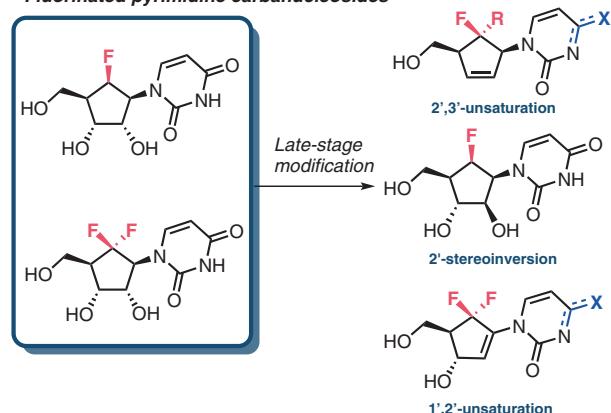
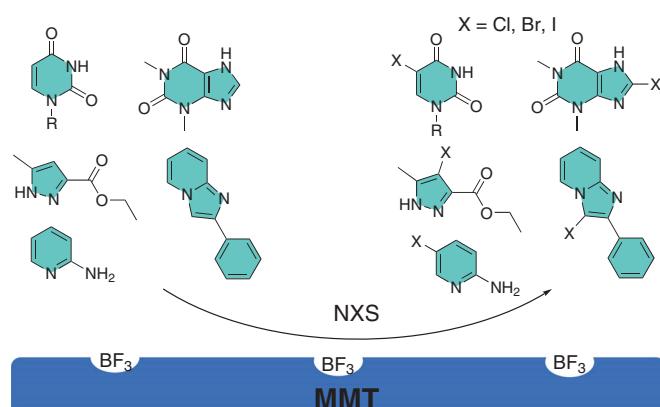


- DMA, 85 °C, 12 h
- ♦ Mild reaction conditions
  - ♦ Inexpensive cyanide source
  - ♦ Scalable
  - ♦ Good yields
  - ♦ Late-stage cyanation of nucleosides
  - ♦ Bioactive nucleosides

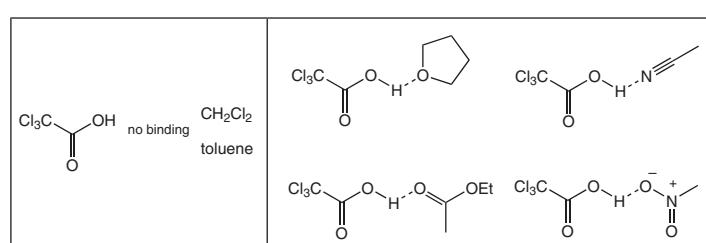
## Chemical Diversification of Carbocyclic Fluorinated Pyrimidine Nucleosides: Introducing 2'-Arabino Analogues and Ring Unsaturation

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659

## Fluorinated pyrimidine carbanucleosides

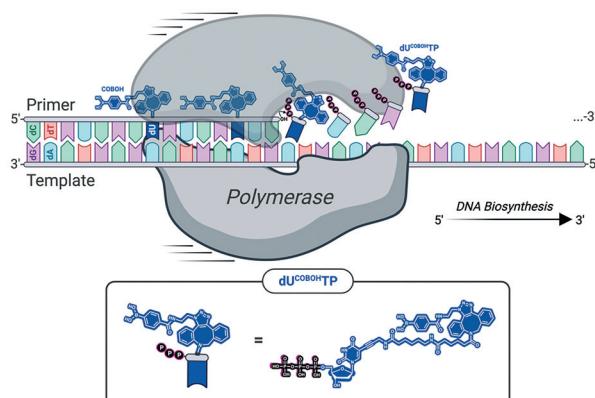
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## Solvent Selection in the Detritylation Reaction for the Solid-Phase Synthesis of Oligonucleotides

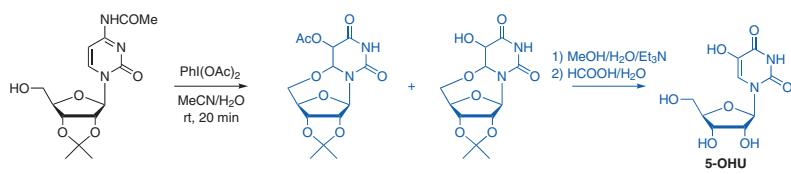
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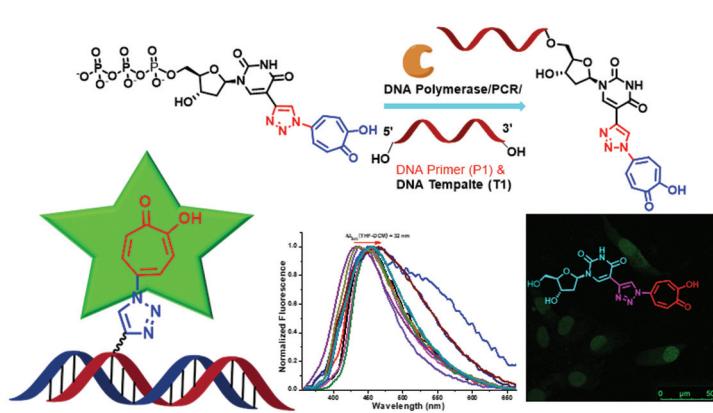
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■ Metal-free oxidation   ■ Halogen-free conditions   ■ Rapid conversion   ■ High yield

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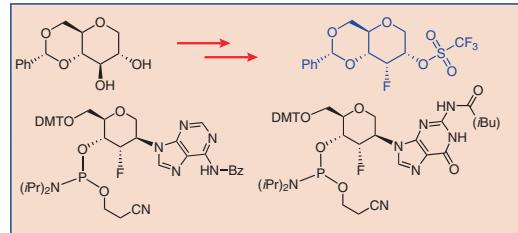
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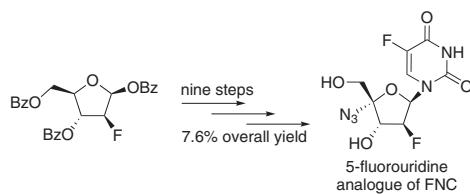


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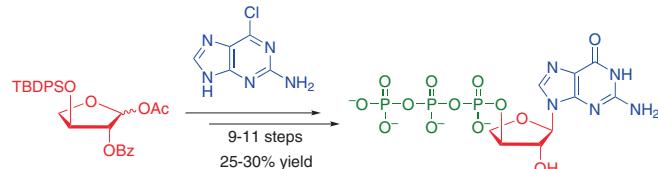
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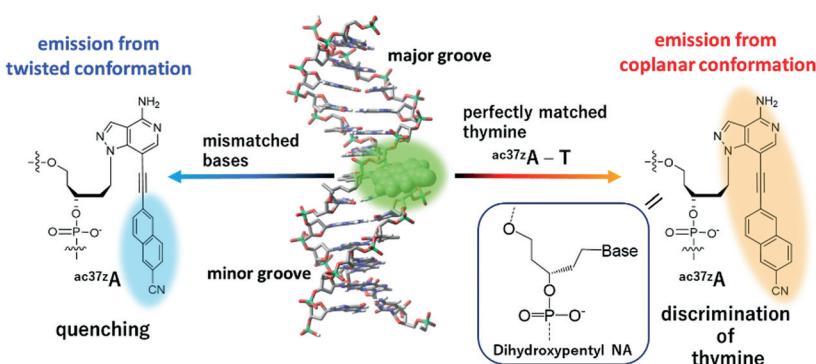
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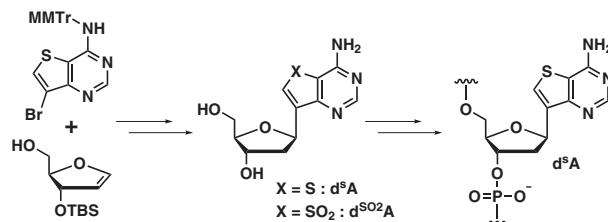


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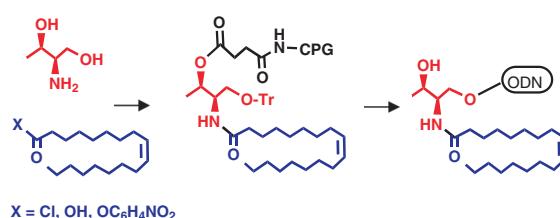
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