## A Convenient Synthesis of *N*,*N'*-dibenzyl-2,4-diaminopyrimidine-2'-deoxyribonucleoside and 1-Methyl-2'-Deoxypseudoisocytidine

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## **Abstract**

The syntheses of *N*,*N'*-dibenzyl-2,4-diaminopyrimidine-2'-deoxyribonucleoside and 1-methyl-2'-deoxypseudoisocytidine via Heck coupling are described. A survey of the attempts to use the Heck coupling to synthesize *N*,*N'*-dibenzyl-2,4-diaminopyrimidine-2'-deoxyribonucleoside is provided, indicating a remarkable diversity in outcome depending on the specific heterocyclic

## **Keywords**

- Synthesis,
- Heck coupling,
- hydrogen bonding patterns,
- synthetic biology,
- artificial genetic systems