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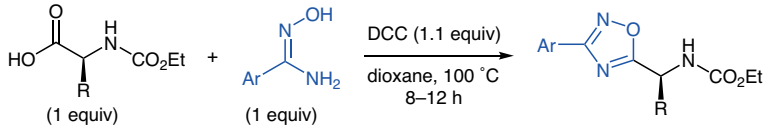
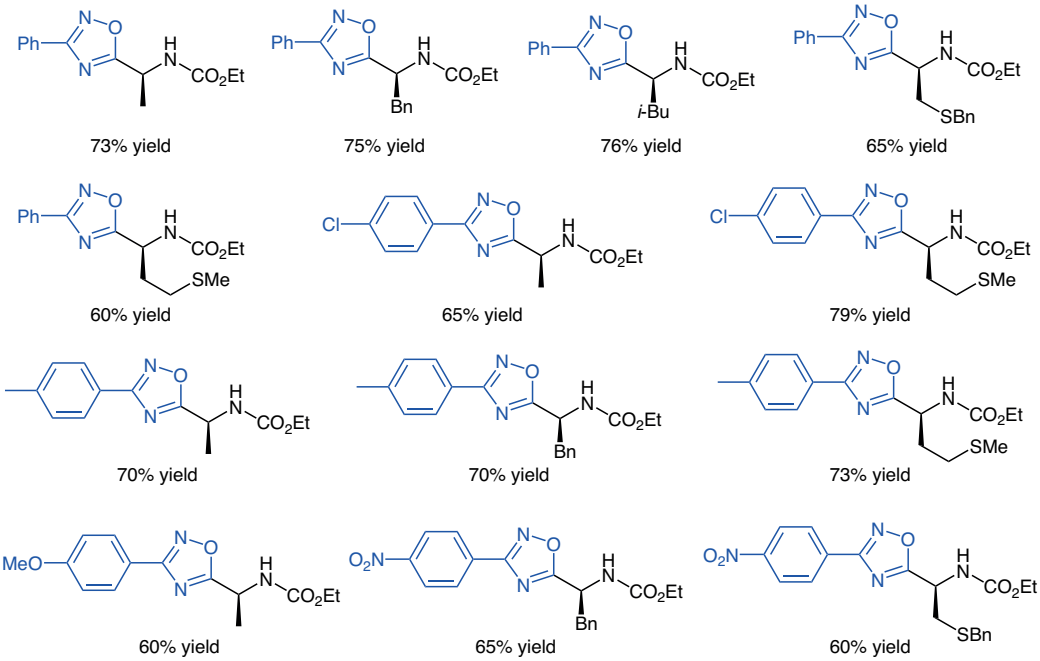
'One-Pot' Synthesis of Chiral N-Protected α-Amino Acid-Derived 1,2,4-Oxadiazoles
Synthesis **2004**, 1589–1594, DOI: 10.1055/s-2004-822391

Synthesis of 1,2,4-Oxadiazoles Bearing Chiral N-Protected α-Amino Acids



Selected examples:



Significance: Oxadiazole-containing amino acids are privileged scaffolds in the pharmaceutical industry, enhancing the stability and bioavailability of drug candidates. In 2004, Braga and Dornelles developed a one-pot synthesis of chiral N-protected α-amino acid derived 1,2,4-oxadiazoles.

Comment: Various N-protected amino acids were reacted with amidoximes in the presence of *N*,*N*′-dicyclohexylcarbodiimide (DCC) to afford smoothly the desired 1,2,4-oxadiazoles bearing chiral N-protected α-amino acids in good yields. This one-pot, simple protocol uses inexpensive and readily available DCC as the reagent.

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