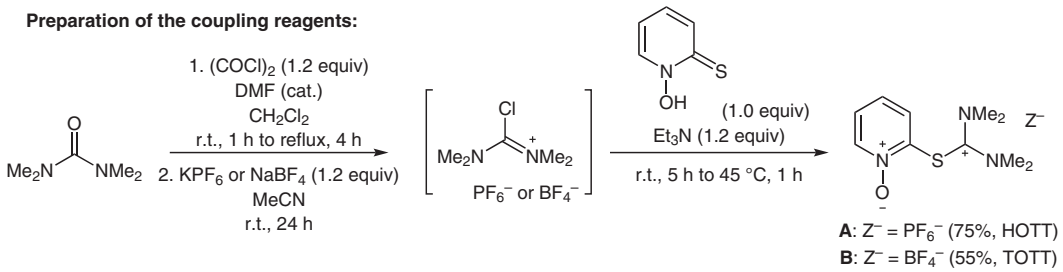
M. A. BAILÉN, R. CHINCHILLA, D. J. DODSWORTH, C. NÁJERA* (UNIVERSIDAD DE ALICANTE, SPAIN)

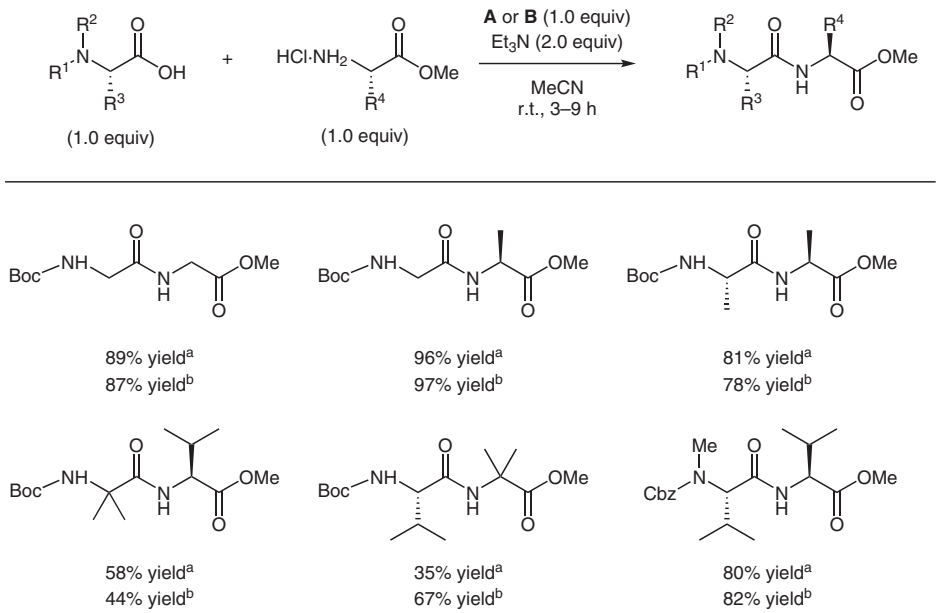
2-Mercaptopyridone 1-Oxide-Based Uronium Salts: New Peptide Coupling Reagents
J. Org. Chem. **1999**, *64*, 8936–8939, DOI: 10.1021/jo990660q.

Thiopyridone-Derived Reagents for Peptide Coupling Reactions

Preparation of the coupling reagents:



Selected examples for peptide coupling reactions:



[a]Using **A** as the coupling reagent. [b]Using **B** as the coupling reagent.

Significance: Peptide coupling reagents are extremely important in peptide synthesis. In 1999, Nájera and co-workers reported a method for synthesizing thiopyridone-derived uronium salts as coupling reagents. The reagents were prepared from cheap starting materials, making them more economical than conventional coupling reagents such as HOBt.

Comment: By using the thiopyridone-derived reagents as coupling reagents, various dipeptides were synthesized in moderate to excellent yields.

SYNFACTS Contributors: Hisashi Yamamoto, An Wu
Synfacts 2021, 17(05), 0587 Published online: 20.04.2021
DOI: 10.1055/s-0040-1706184; **Reg-No.:** H02621SF

Category
Peptide Chemistry

Key words
peptide bond formation
uronium salts
coupling agents
thiopyridones