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Indium-Mediated Facile Cleavage of the *t*-Butoxycarbonyl Group from Di-*t*-butylimidodicarbonate
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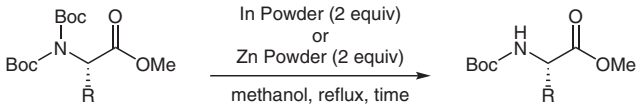
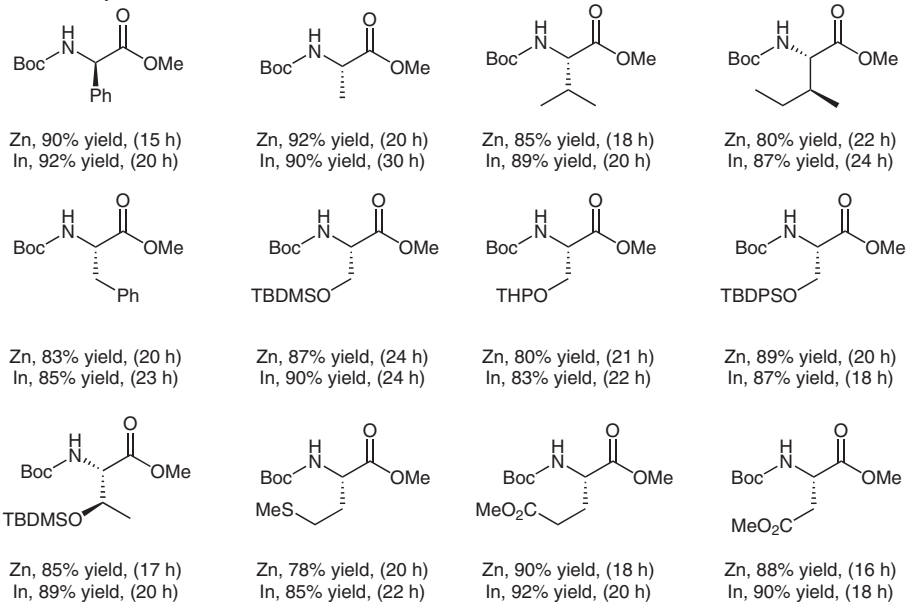
Chemoselective Cleavage of the *tert*-Butoxycarbonyl Group from Di-*tert*-butylimidodicarbonate



Selected examples:



Significance: Chemoselective reactions play a vital role in organic synthesis. Chemoselective protection and deprotection with protecting groups is one of the most important technologies in peptide chemistry. In 2002, Yadav and coworkers developed the facile Zn/In-mediated cleavage of the *tert*-butoxycarbonyl group from di-*tert*-butylimidodicarbonate.

Comment: Indium- or zinc-mediated chemoselective deprotection of the *tert*-butoxycarbonyl group from di-*tert*-butylimidodicarbonate proceeded smoothly to deliver the desired mono-Boc-protected amines in high yields. This protocol is highly chemoselective, practically simple, mild, and efficient for various amino acids.

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Category
Peptide Chemistry

Key words
zinc
indium
di-*tert*-butylimidodicarbonate

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