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SYNFACTS Highlights in Chemical Synthesis

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Georg Thieme Verlag KG
Rüdigerstraße 14
70469 Stuttgart
ISSN 1861-1958

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Two Step Synthesis of $\beta^{2,2}$ -Amino Acids from Alkylidenemalononitriles and Cbz-Gly

Category

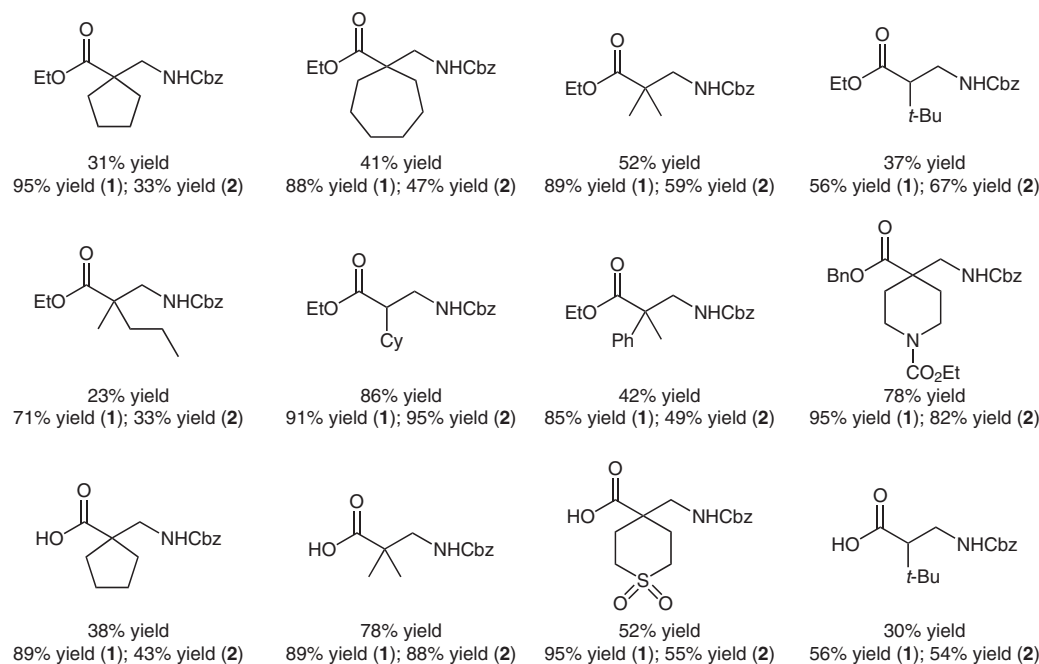
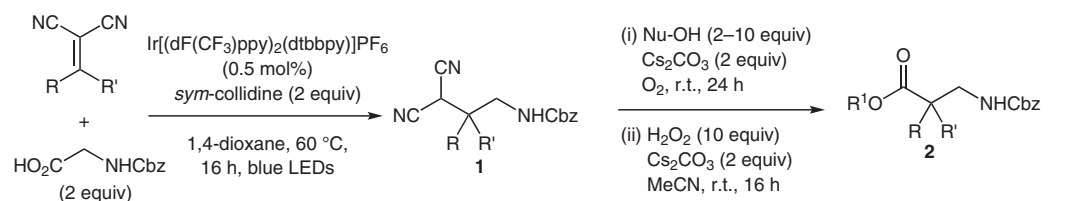
Peptide Chemistry

Key words

iridium catalysis

$\beta^{2,2}$ -amino acids

glycine



Significance: The β -amino acid motif is present in several important natural products. The authors have reported the $\beta^{2,2}$ -amino acids synthesis from alkylidenemalononitriles and Cbz-glycine via β -quaternary malononitriles.

Comment: The desired $\beta^{2,2}$ -amino acids were formed by oxidation of quaternary malononitriles, which were prepared from various alkylidenemalononitriles and glycine derivatives by the help of iridium catalysis.