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A Rapid and Efficient Protocol for Chiral Sulfoxide Amides: Versatile Asymmetric Synthon

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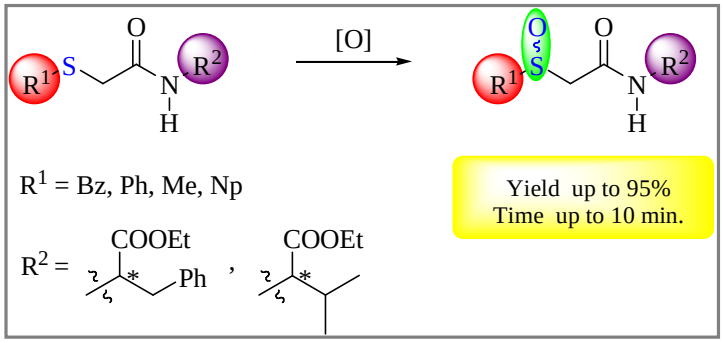
ABSTRACT

A novel strategy for synthesis of chiral sulfoxide amides using aliphatic amino esters as chiral auxiliary is described. The condensation of benzyl/phenyl/methyl/naphthylthioethanoic acids with chiral amino esters followed by oxidation resulted in formation of chiral sulfoxide amides. All the new products were characterized on the basis of various spectroscopic techniques such as FT-IR, ^{1}H NMR, ^{13}C NMR and CHN elemental analysis. The methodology provides simple, fast and convenient access towards synthetically useful chiral sulfoxide amides.

Graphical Abstract



Keywords: Chiral sulfoxide amides, Amino esters, Substituted ethanoic acids, Oxidation, β-Lactams.