

Synthesis of PhTAD-substituted dihydropyrrole derivatives via stereospecific C—H amination.

Autorzy

Melek Gül

Yiannis Elemes

Emel Pelit

Eleni Dernektsi

Dimitra Georgiou

Kosmas Oikonomou

Tadeusz Lis

Sławomir Szafert

Rok wydania

2017

Czasopismo

Research on Chemical
Intermediates

Numer woluminu

43

Strony

1031-1045

DOI

10.1007/s11164-016-2681-x

Kolekcja

Naukowa

Język

Angielski

Streszczenie

Stereospecific α -amination has been accomplished via addition of *N*-phenyltriazolinedione (PhTAD) to the allylic position of dihydropyrroles. The aim of this study is to evaluate new PhTAD derivatives of biologically active bicyclic dihydropyrroles. Ene reaction was accomplished via addition of PhTAD to the allylic position to react with *syn* and *anti* diastereomers for α -amination. The α -amination depends on the stereochemistry, proceeding faster with *syn* than *anti* diastereoisomers. Steric hindrance from sulfide substituent slows down the transformation. Although the results are in accordance with an ene reaction followed by 1,3-shift of the urazole moiety, deuteration at the allylic position by simply stirring the diastereoisomeric dihydropyrroles in MeOD revealed a [1,3-H] shift. The stereospecificity of the transformation is attributed to steric hindrance during the allylic transposition step.

Słowa kluczowe

Ene reaction, α -Amination, *N*-phenyltriazolinedione,
Dihydropyrrole, Allylamine

Adres publiczny

<http://dx.doi.org/10.1007/s11164-016-2681-x>

Strona internetowa wydawcy

<http://www.elsevier.com>

Artykuł

Plik został wygenerowany dnia 2026-10-07 00:57:10

Adres w repozytorium https://old.chem.uni.wroc.pl/pl/repozytorium/p2_ucdh.