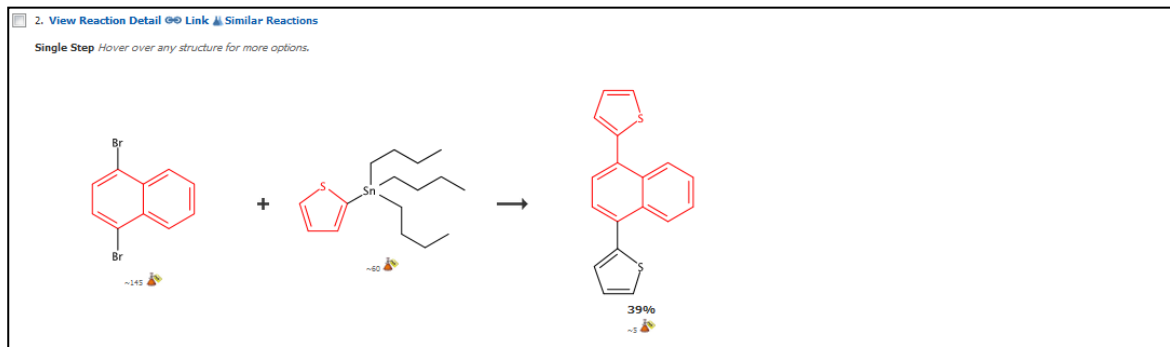




MethodsNow Synthesis 機能お試しキャンペーン利用方法

MethodsNow Synthesis 機能により反応検索結果からワンクリックで詳細な実験手順や生成物のスペクトルデータを見やすいテーブル形式で表示できます。

お一人当たり 5 回まで無料でご利用頂けます。是非お試しください。



Overview

Experimental Procedure

General/Typical Procedure: 1,4-Bis(2-thienyl)benzene (TBT).¹² A solution of 1,4-dibromonaphthalene (1.002 mmol) and (Ph₃P)₂PdCl₂ (0.0348 g, 0.0496 mmol) in degassed THF (10 mL) and tributylstannylthiophene (0.822 g, 2.20 mmol) dropwise over 2 min. The filtrate was stirred with 1 M aqueous KF for 15 min and then filtered. The organic layer was extracted with saturated aqueous NH₄Cl and distilled water. The organic layer was evaporated. The product was purified by column chromatography (SiO₂, eluant 5% DCM in hexane). The reaction conditions used in the preparation of TBT were followed. 1,4-Dibromonaphthalene (1.002 mmol) were added and heated as described for TBT. The reaction was left to heat and stir for 2 h. The product was purified by column chromatography (SiO₂, eluant 5% DCM in hexane) to give a yellow solid (0.1127 g, 0.3860 mmol, 39%). ¹H NMR and ¹³C NMR data.

METHODSNOW™

Procedure

- Heat a solution of 1,4-dibromonaphthalene (1.002 mmol) and (Ph₃P)₂PdCl₂ (0.0348 g, 0.0496 mmol) in degassed THF (10 mL) and tributylstannylthiophene (0.822 g, 2.20 mmol) dropwise over 2 minutes.

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Available Experimental Data

HRMS: State

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Comparative Survey of Conducting Polymers Containing Benzene, Naphthalene, and Anthracene Cores: Interplay of Localized Aro...

By Fraind, Alicia M.; Tovar, John D.
From Journal of Physical Chemistry B, 114(9), 3104-3116; 2010
Published by American Chemical Society

レコード内容

- 生成物
- 反応物
- 触媒
- 溶媒
- 合成手順
- 反応形態
- スケール
- 状態
- NMR, MS etc.

Products	Thiophene, 2,2'-(1,4-naphthalenediyl)bis-, 39%, CAS RN: 126324-43-6
Reactants	Naphthalene, 1,4-dibromo-, CAS RN: 83-53-4 Stannane, tributyl-2-thienyl-, CAS RN: 54663-78-4
Reagents	Potassium fluoride, CAS RN: 7789-23-3
Catalysts	Dichlorobis(triphenylphosphine)palladium, CAS RN: 13965-03-2
Solvents	Water, CAS RN: 7732-18-5 Dimethylformamide, CAS RN: 68-12-2
Procedure	1. Heat a solution of 1,4-dibromonaphthalene (1.002 mmol) and (Ph ₃ P) ₂ PdCl ₂ (0.0348 g, 0.0496 mmol) in degassed THF (10 mL) and tributylstannylthiophene (0.822 g, 2.20 mmol) dropwise over 2 minutes. ~省略~ 14. Remove the solvent under reduced pressure by rotary evaporation. 15. Purify the product by column chromatography (SiO ₂ , eluant hexane).
Transformation	Arylation and Alkylation of Alkenes/ Solle Coupling Coupling of Aryl and Alkyl Organometallic Compounds with Aryl Halides, Ethers, and Carboxylic Esters
Scale	milligram
HRMS	EI/ CI: found 292.0375 (M ⁺); calcd for C ₁₈ H ₁₄ S ₂ : 292.0380.
State	yellow solid.
CAS Method Number	3-130-CAS-1032360

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