Trifluoromethanesulfonic acid catalyzed friedel-Crafts alkylations of 1,2,4-trimethoxybenzene with aldehydes or benzylic alcohols.

Wilsdorf M, Leichnitz D, Reissig HU (2013) Trifluoromethanesulfonic acid catalyzed friedel-Crafts alkylations of 1,2,4-trimethoxybenzene with aldehydes or benzylic alcohols. *Org Lett* 15(10), 2494-2497.

Details

PubMed

Abstract

Trifluoromethanesulfonic acid in acetonitrile was found to efficiently catalyze Friedel-Crafts alkylations of 1,2,4-trimethoxybenzene with a variety of simple or functionalized aldehydes to provide di- or triarylmethanes in high yields. The operationally simple protocol allowed a short synthesis of the phenylpropanoid natural product (-)-tatarinoid C establishing its absolute configuration. Under the developed reaction conditions a benzylic alcohol instead of an aldehyde also underwent reactions with 1,2,4-trimethoxybenzene and other nucleophiles to afford unsymmetrically substituted compounds.

Involved units

Chemical Biology of Microbe-Host Interactions Christine Beemelmanns Read more

Identifier

doi: 10.1021/ol400972m

PMID: 23642222