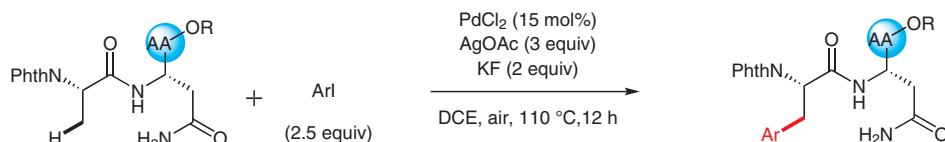
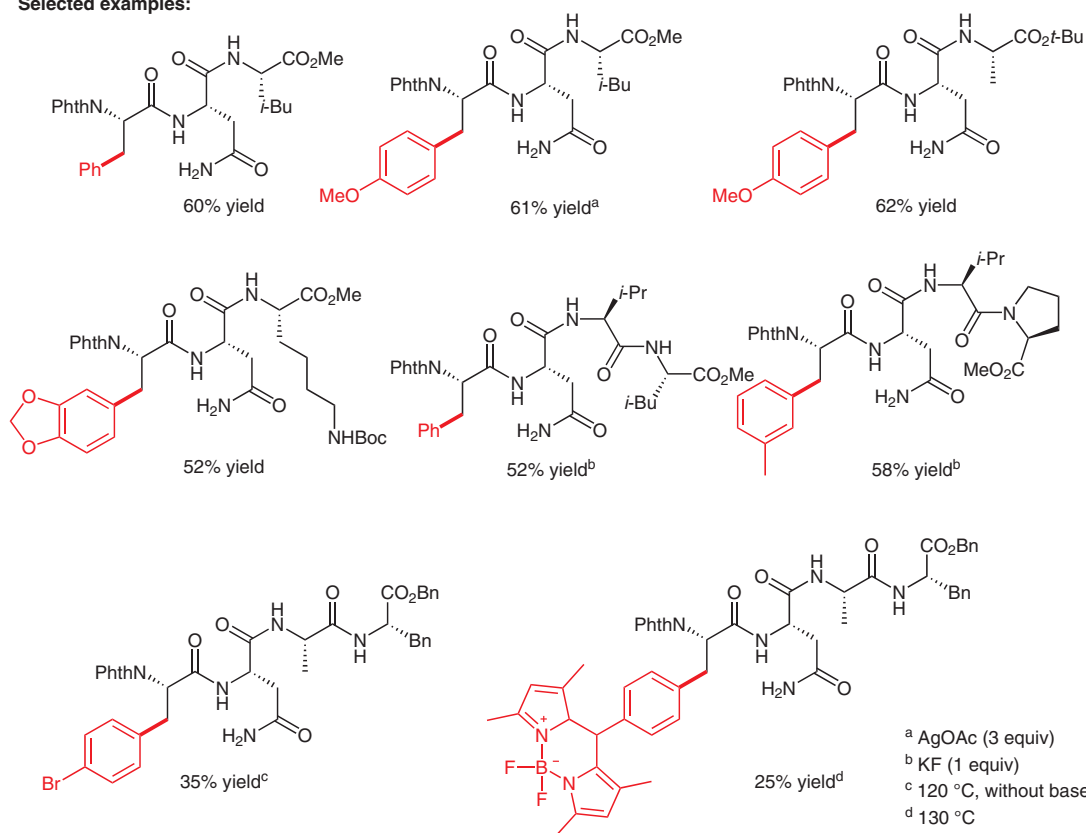


Y. WENG*, X. DING, J. C. A. OLIVEIRA, X. XU, N. KAPLANERIS, M. ZHU, H. CHEN, Z. CHEN, L. ACKERMANN* (ZHEJIANG UNIVERSITY OF TECHNOLOGY, HANGZHOU, P. R. OF CHINA AND GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN, GERMANY)
 Peptide Late-Stage C(sp³)-H Arylation by Native Asparagine Assistance without Exogenous Directing Group
Chem. Sci. **2020**, *11*, 9290–9295, DOI: 10.1039/d0sc.03830j.

Palladium-Catalyzed C(sp³)-H Arylation of Peptides Assisted by Unmodified Asparagine



Selected examples:



Significance: Late-stage modification of peptides has emerged as an invaluable method in synthetic chemistry. The authors report a C(sp³)-H arylation of peptides by a palladium-catalyzed reaction with internal asparagine (Asn) as a directing group.

Comment: The site-selective C(sp³)-H arylation proceeded smoothly at the N-termini of di-, tri-, or tetrapeptides, assisted by the unmodified side chain of Asn, without any exogenous directing group.

SYNFACTS Contributors: Hisashi Yamamoto, Tomohiro Hattori
 Synfacts 2020, 16(11), 1367 Published online: 20.10.2020
 DOI: 10.1055/s-0040-1706528; Reg-No.: H13120SF

© 2020, Thieme. All rights reserved.
 Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

Category

Peptide Chemistry

Key words

palladium catalysis

C–H activation

arylation

asparagine

Synfact
 of the
 Month

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.