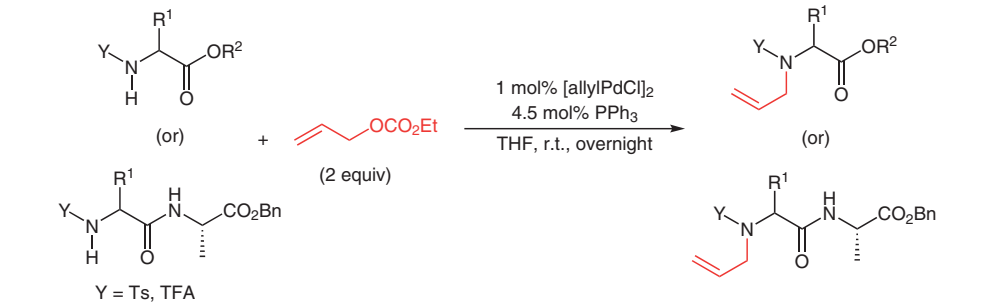
Category
Peptide Chemistry

Key words
palladium catalysis
allylation
amino acids
peptides

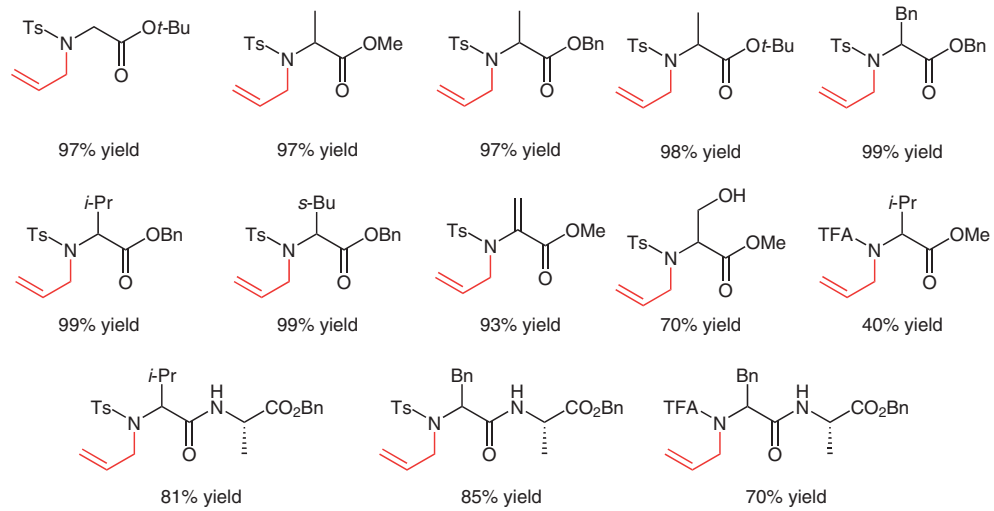
F. L. ZUMPE, U. KAZMAIER* (UNIVERSITÄT HEIDELBERG, GERMANY)

Application of the Palladium-Catalyzed N-Allylation to the Modification of Amino Acids and Peptides
Synthesis **1999**, 1785–1791, DOI: 10.1055/s-1999-3598.

Synthesis of *N*-Allyl Amino Acids and Peptides



Selected examples:



Significance: *N*-Alkyl amino acids and peptides are key building blocks for many peptide drugs. In particular, *N*-allyl amino acids and peptides form key motifs for the synthesis of cyclic peptides. In 1999, Kazmaier and Zumpe developed a palladium-catalyzed N-allylation of *N*-tosyl and *N*-trifluoroacetyl amino acids and peptides.

Comment: Palladium-catalyzed N-allylation of esters of *N*-tosyl and *N*-trifluoroacetyl amino acids and peptides with allyl ethyl carbonate proceeded smoothly to deliver desired products in good yields. The protocol is very simple in practice and proceeds under neutral conditions.

SYNFACTS Contributors: Hisashi Yamamoto, Isai Ramakrishna
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