

[Chemistry](#), 2010 Apr 6;16(13):3970-82. doi: 10.1002/chem.200903512.

Electrochemical deallylation of alpha-allyl cyclic amines and synthesis of optically active quaternary cyclic amino acids.

[Kirira PG](#)¹, [Kurivama M](#), [Onomura O](#).

⊖ Author information

¹Graduate School of Biomedical Sciences, Nagasaki University, 1-14 Bunkyo-machi, Nagasaki 852-8521, Japan.

Abstract

Electrochemical oxidation of alpha-allylated and alpha-benzylated N-acylated cyclic amines by using a graphite anode easily affords the corresponding alpha-methoxylated products with up to 76 % yield. Ease of oxidation was affected by the type of electrode, the size of cyclic amine, and the nature of the protecting group. This method was successfully applied to the synthesis of optically active N-acylated alpha-alkyl-alpha-amino acid esters with up to 99 % ee.

PMID: 20175166 [PubMed - indexed for MEDLINE]