Iodine-Catalyzed Etherification of Morroniside

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Abstract

In this study, we describe a highly selective etherification procedure of unprotected morroniside catalyzed by molecular iodine in acetone. The etherification reaction furnished 7-*O*-alkyl ether derivatives in reasonable yields within few hours under neutral conditions. Studies of the obtained products on cytotoxicity activity in colon 26-L5 cell line were examined. Among the tested compounds, 7-*O*-dodecylmorroniside showed moderate cytotoxic activity, having IC_{50} values equal to 20.9 μM.