

New Cross-Coupling Process of Making Cholesterol esters

Abstract:

Cholesterol is a sterol with a four-membered ring structure with a single hydroxyl group attached to one of the rings. It is the active, raw form of cholesterol. Cholesteryl Ester is the inactive form in which cholesterol is esterified to be transported to target organs. The newly developed process of making bulky esters from unprecedented tertiary alcohol is applied to synthesize cholesterol esters successfully. The aim of this project is to make a series of cholesterol esters and investigate the broader application of those molecules in biological sciences.