

ABSTRACT

Kinetics of ester formation from octanol - hexanoic acid and cetyl alcohol - oleic acid was studied by using immobilized lipase Novozym 435 Candida Antarctica lipase immobilized onto macro porous acrylic resin gave the best results. Different parameters like reaction medium temperature, substrate concentration, stirring speed and moisture level were optimized for the synthesis of esters of hexanoic and oleic acid. The enzyme was used repeatedly in batch reactions and found to be highly efficient and have reasonable operational stability.