

### Lipase-Catalyzed Dynamic Kinetic Resolution of Naproxen Esters in organic solvents

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Lipase-catalyzed hydrolysis of racemic naproxen esters were carried out under in situ racemization of substrate by using bases in organic solvents. Conventional enzymatic kinetic resolution has a disadvantage of maximum 50% yield of a desired product. Dynamic resolution in which kinetic resolution process is coupled with continuous in situ racemization of the starting substrate has been proved to be an efficient process to overcome this limitation. In this work, instead of traditional organic bases such as trioctylamine, solid bases were introduced in dynamic kinetic resolution of naproxen esters and their performance as a racemization catalyst was examined. In order to improve the efficiency of the dynamic resolution process, lipase was immobilized to various solid supports. Effects of enzyme immobilization on the dynamic kinetic resolution were also investigated.