

Denisa Hapău, Jürgen Brem, Mădălina Moisă, Monica-Ioana Toșa, Florin Dan Irimie, Valentin Zaharia (2013):

Heterocycles 32. Efficient kinetic resolution of 1-(2-arylthiazol-4-yl)ethanols and their acetates using lipase B from *Candida Antarctica*

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Abstract

In this paper we describe the chemoenzymatic synthesis of new enantiomerically enriched (*R*)- and (*S*)-1-(2-arylthiazol-4-yl)ethanols and their acetates by enzymatic enantioselective acetylation of the racemic alcohols *rac*-**2a-d** and by methanolysis of the corresponding racemic esters *rac*-**3a-d** mediated by lipase B from *Candida antarctica* (CaL-B) in non-aqueous media. In terms of stereoselectivity and activity, both procedures, acylation and alcoholysis, gave similar good results (50% conversion, $E \gg 200$). The absolute configuration of the kinetic resolution products was determined by a detailed ^1H NMR study of the Mosher's derivatives of (*S*)-**2b**.

