



Alcohols O 0230

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## Tandem Catalysis by Lipase in a Vinyl Acetate Mediated Cross-Aldol Reaction.

— Novozym435/NEt<sub>3</sub>-catalyzed treatment of isopropenyl acetate with aromatic aldehydes is found to allow new, mild, and efficient access to β-hydroxy ketones. Starting from vinyl acetate β-hydroxy aldehydes are formed which are directly reduced to the corresponding diols. In the presence of L-proline asymmetric reaction takes place but only low to moderate enantioselectivity is achieved. — (KUMAR, M.; SHAH\*, B. A.; TANEJA\*, S. C.; Adv. Synth. Catal. 353 (2011) 8, 1207-1212,

http://dx.doi.org/10.1002/adsc.201000980; Nat. Prod. Chem., Indian Inst. Integr. Med., Jammu Tawi 180 001, India; Eng.) — Jannicke

Me H<sub>2</sub>C O-Ac I (IIc,f), A) 
$$(R)$$
-III IV  $(R)$ -V  $(R)$ 

A): 20 mol% L-proline (cat.), Novozym 435, iPrOH, 25°C

B): NaBH<sub>4</sub>, MeOH, 0°C

I 
$$Ar^{2}$$
—CHO (VI) OH Me OH Me OH  $Ar^{2}$ —OHO VIII  $Ar^{2}$ —OHO VIII  $Ar^{2}$ —OHO  $Ar^{2}$ —OH