

Lipase- and Base Catalyzed Synthesis of Enantiopure β -Blocker (*S*)-Atenolol

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HPLC chromatograms

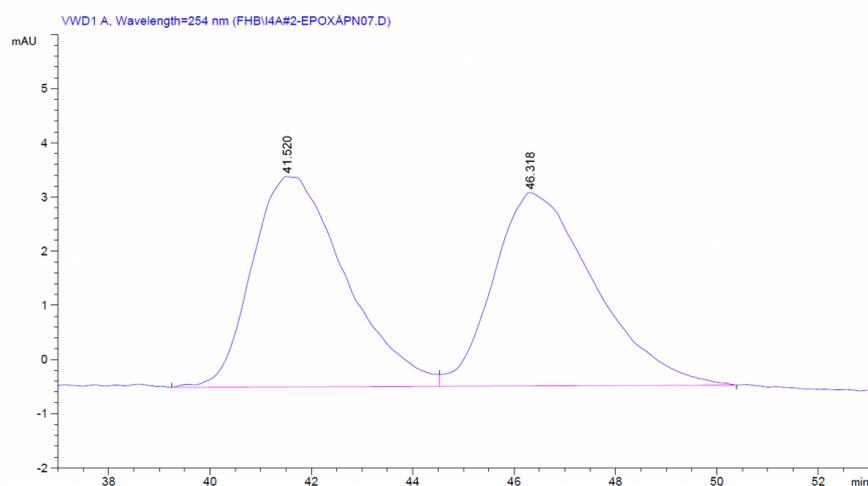


Figure S1. 2-(4-(3-Chloro-2-hydroxypropoxy)phenyl)acetamide (**2a**), resolved on a Chiralcel OD-H column (250 mm L x 4.6 mm ID, 5 μ m particle size), isocratic eluent *i*-PrOH: *n*-hexane:, 17:83, 1.0 mL/min. t_R (*S*)-**2a** = 41.52 min, t_R (*R*)-**2a** = 46.31 min, R_S = 1.74.

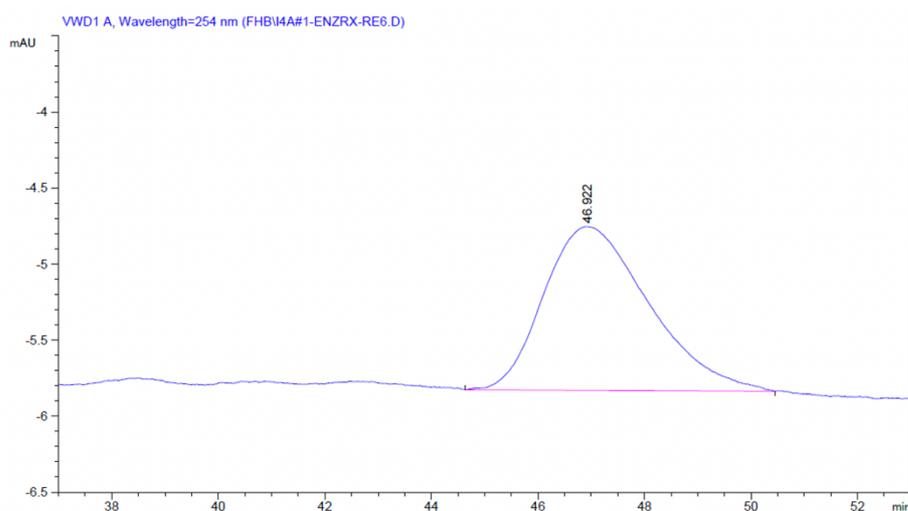


Figure S2. (*R*)-2-(4-(3-chloro-2-hydroxypropoxy)phenyl)acetamide ((*R*)-**2a**), analyzed on Chiralcel OD-H column (250 mm L x 4.6 mm ID, 5 μ m particle size), isocratic eluent *i*-PrOH: *n*-hexane:, 17:83, 1.0 mL/min, t_R (*R*)-**2a** = 46.92 min, > 99% *ee*.

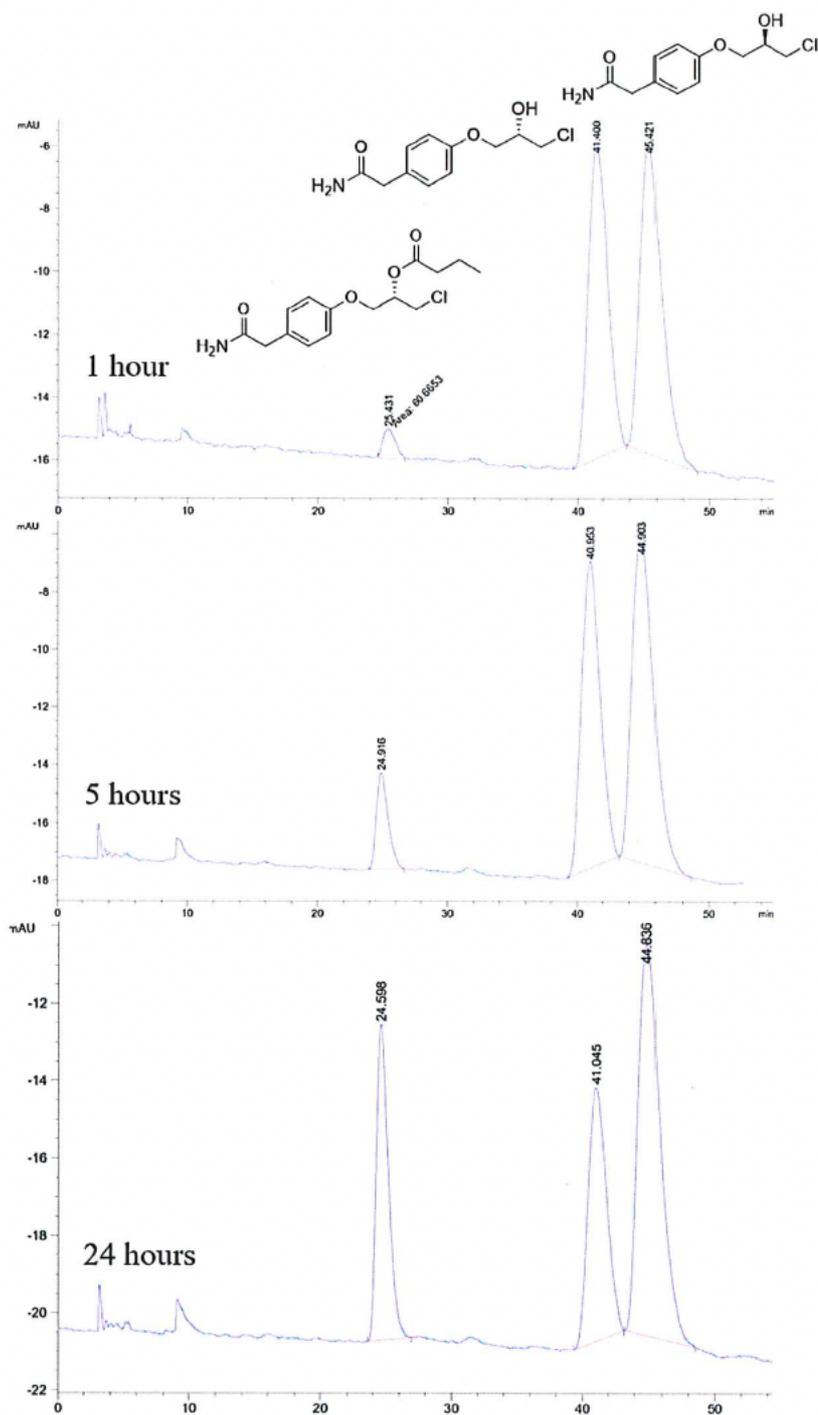


Figure S3: Kinetic resolution of **2a** catalyzed by CALB after 1, 5 and 24 hours of reaction. HPLC analyses performed on a Chiralcel OD-H column (250 mm L x 4.6 mm i.d, 5 μ m particle size) with isocratic eluent *i*-PrOH:*n*-hexane, 17:83, flow 1 mL/min. This gave unseparated ester enantiomers t_R (*R/S*)-**2b** = 25.37 min, t_R (*S*)-**2a** = 41.66 min and t_R (*R*)-**2a** = 45.22 min with $R_s = 1.4$.

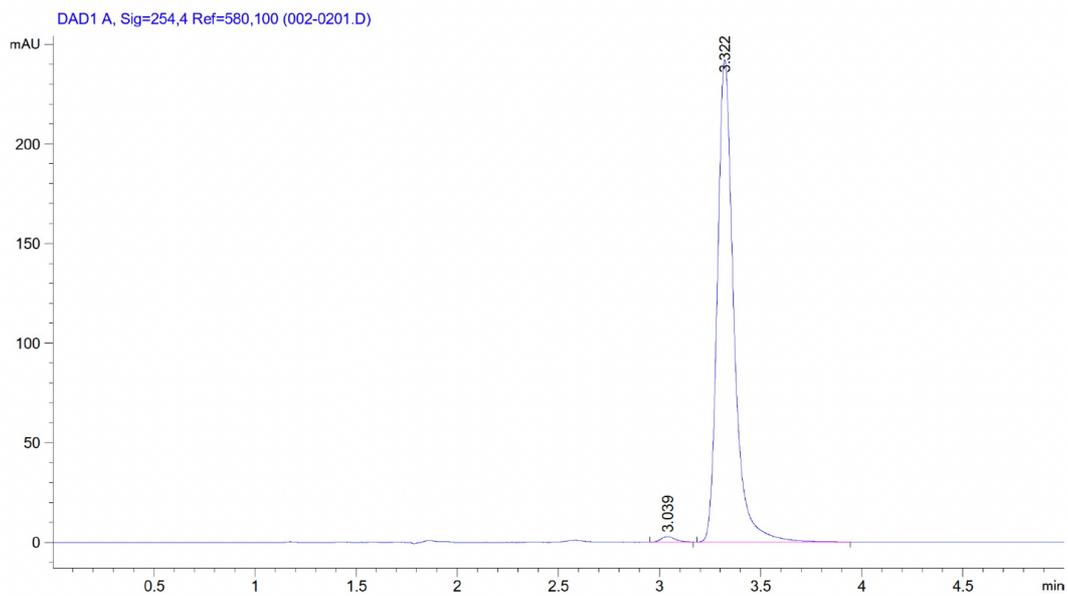


Figure S4: HPLC-chromatogram of chlorohydrin **2a** ($t_R = 3.32$ min) analyzed on an (achiral) Agilent Zorbax Eclipse XBD-C18 column (150 mm L \times 4.6 mm i.d., 5 μ m particle size) with an isocratic mobile phase H₂O:MeCN,25:75 over 5 min, flow 1.0 mL/min.