

Combined Heterogeneous Bio- and Chemo-Catalysis for Dynamic Kinetic Resolution of (*rac*)-Benzoin

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Supporting Information

HPLC-Analysis:

All data acquisition for lipase activity in KR, determination of enantiomeric excess and conversion measurements in (D)KR were performed by HPLC analysis. An exemplary HPLC-spectrum is shown in Figure S1). Further details concerning the HPLC-method are given in the experimental section of the main manuscript.

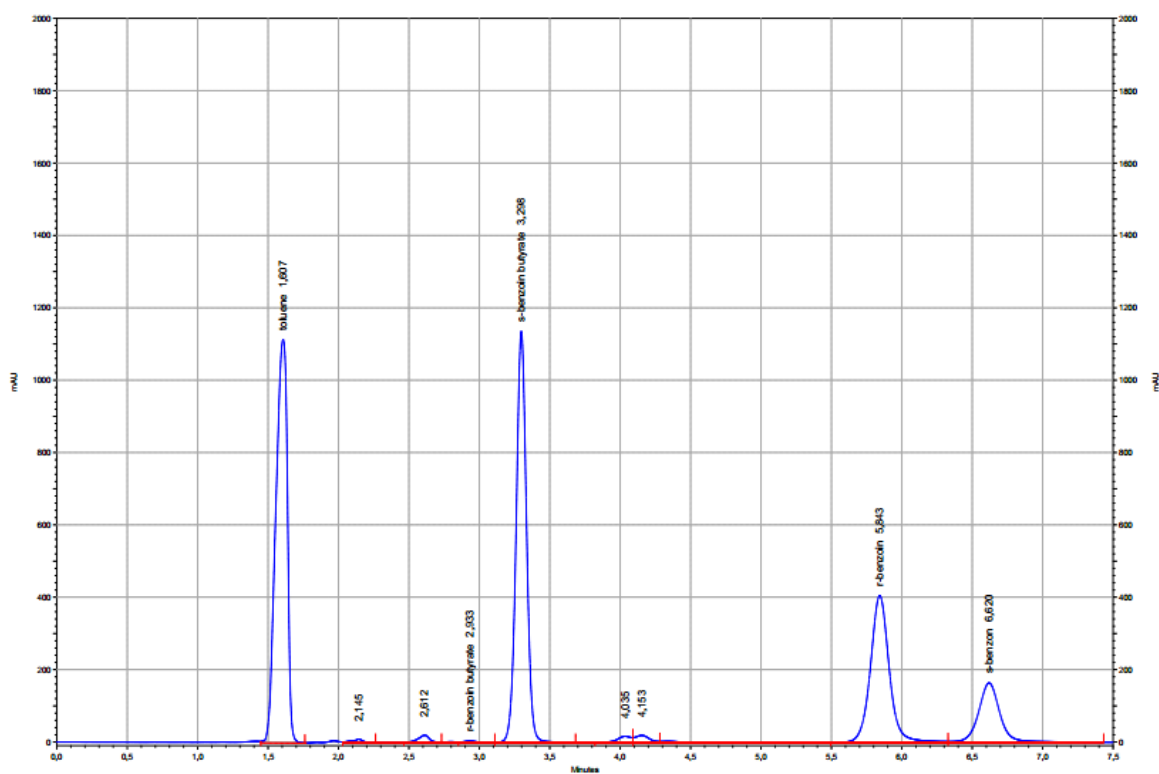


Figure S1. Exemplary HPLC-spectrum during DKR of (*rac*)-benzoin with Acc-LipTL and Zr-TUD-1 (Si/Zr=25) in toluene.

NMR:

Product ester characterization from (D)KR of (*rac*)-benzoin with Acc-LipTL, and in case of DKR with TUD-1 catalyst, was performed via $^1\text{H-NMR}$. The corresponding spectrum of benzoin butyrate is given in Figure S2.

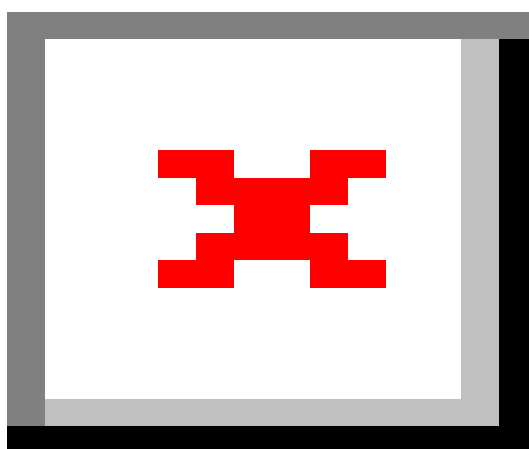


Figure S2. NMR spectrum of benzoin butyrate.

($^1\text{H-NMR}$ (400 MHz, CDCl_3): 7.92 (m, 2H; Ar-H), 7.55-7.3 (m, 8H; Ar-H), 6.85 (s, 1H; CHO), 2.51-2.39 (m, 2H; CH₂), 1.74-1.60 (m, 2H; CH₂), 0.98-0.90 (m, 3H; CH₃))