Electronic Supplementary Information

Biocatalytic stereoinversion of D-*para*-bromophenylalanine in a one-pot threeenzyme reaction

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Key words: Phenylalanine dehydrogenase, D-amino acid transaminase, *para*bromophenylalanine, deracemisation Fig. S1 The purification steps of DAAT analysed by SDS-PAGE. From the left side, lanes show the protein marker, crude extract, 35% ammonium sulfate precipitate and Q Sepharose eluate.

Fig. S2 HPLC chromatograms from reactions with 6.5 mM *para*-bromo-DLphenylalanine, 15 mM α -ketoglutarate, 10 mM NADH, 20 μ M PalP, 0.2 mg DAAT and 4 μ g PheDH. (a) contains all components other than enzymes; therefore no reaction occurs and the presence of both untouched amino acid enantiomers can be seen as two peaks with almost equal peak areas. (b) adding enzymes ends up in stereo-inversion of all the D to the L-enantiomer. The reaction was incubated at 37°C for two hours. HPLC conditions: isocratic flow of 90% methanol on Astec CHIROBIOTIC chiral column, flow rate of 0.3 mL/min and detection at 225 nm

Fig. S1



Fig. S2

