Supplementary Material (ESI) for Organic & Biomolecular Chemistry

Supporting Information

Site-selective Immobilisation of Functional Enzymes on to Polystyrene Nanoparticles

Lu Shin Wong, Krzysztof Okrasa and Jason Micklefield*

School of Chemistry and Manchester Interdisciplinary Biocentre,

The University of Manchester, 131 Princess Street, Manchester M1 7DN, UK

Fax: +44 (0)161-306-8918; Tel: +44 (0)161-306-4509;

E-mail: jason.micklefield@manchester.ac.uk

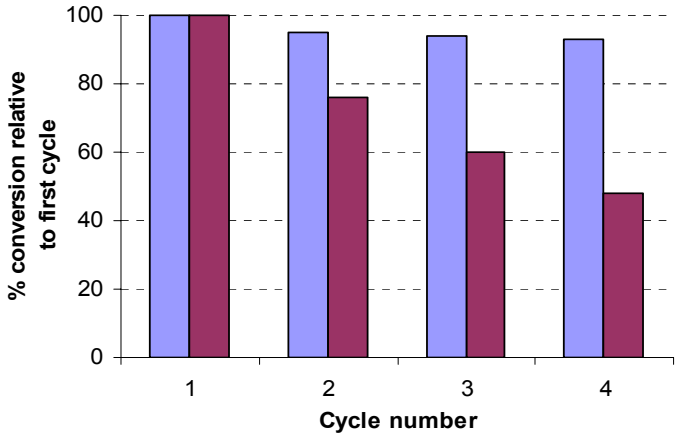

Figure S1: Graph of % conversion relative to cycle 1 by immobilised ybbR-AMDase over four reaction cycles where the enzyme was immobilised in the presence of Sfp (blue bars) and with Sfp omitted (red bars).

Figure S2: Second derivative of the FT-IR spectra of ybbR-AMDase in solution (red), (ybbR-AMDase)-Ppant-NP (green) and CoA-NP (pale blue). The amide I and II bands at 1653 and 1550 cm^{-1} are extremely small and not easily distinguishable from the background, indicating the amount of protein was at or near the detection limit for this method.