Supplementary Material

Mild alkaline hydrolysis of hindered esters in non-aqueous solution

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Table of Contents

1. HPLC chromatograms S2
2. Copies of ^{1}H NMR spectra: comparison of starting and final products.....S4

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HPLC chromatograms

(i). L-Glu and L-Asp (Entries 6 and 7):

Chirobiotic T column

Eluent: water/methanol/formic acid (30:70:0.02)

Flow: 1 mL/min, detection: 205 nm

Detector: Photodiode-array

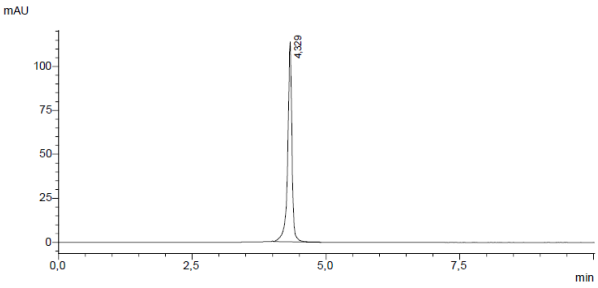


Figure S1. A. HPLC of L-Asp

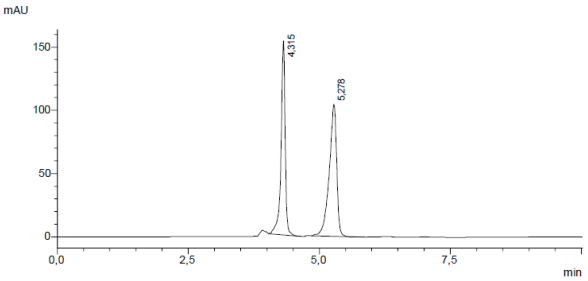


Figure S1. B. HPLC of D,L-Asp (mixture)

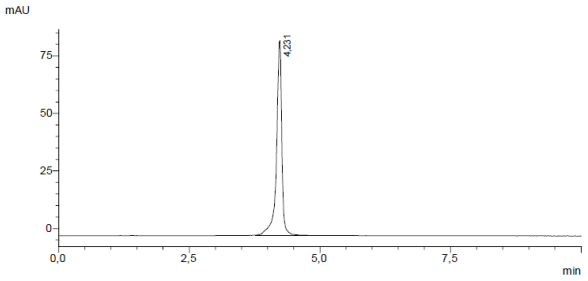


Figure S2. A. HPLC of L-Glu

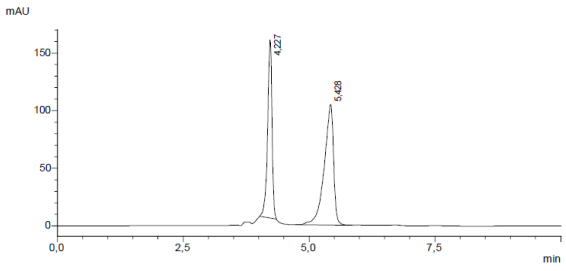


Figure S2. B. HPLC of D,L-Glu (mixture)

(ii). N-methacryloyl-L-prolinate (Entry 8)

Ultron ES-OVM column (chiral), 50x4.6 mm, 5µm

Eluent (1): methanol: 0.02 mol/L NaH_2PO_4/water (30:70), flow rate=1 mL/min, and 1.5 mL/min

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Eluent (2): methanol: 0.02 mol/L NaH_2PO_4/water (50:50), flow rate=1 mL/min, and 1.5 mL/min
Detector: Photodiode-array (PDA), 254 nm.

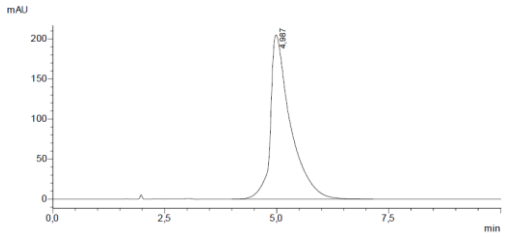


Figure S3. A. HPLC of *N*-methacryloyl-L-proline, Eluent (1): methanol: 0.02 mol/L NaH_2PO_4/water (30:70), flow rate=1 mL/min: t= 4.99 min

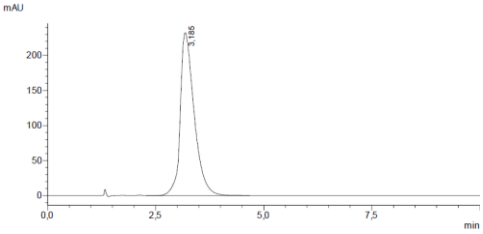


Figure S3. B. HPLC of *N*-methacryloyl-L-proline, Eluent (1): methanol: 0.02 mol/L NaH_2PO_4/water (30:70), flow rate=1.5 mL/min: t= 3.19 min

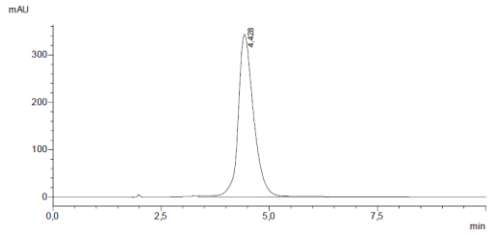


Figure S4. A. HPLC of *N*-methacryloyl-L-proline, Eluent (2): methanol: 0.02 mol/L NaH_2PO_4/water (50:50): flow rate=1 mL/min: t= 4.43 min

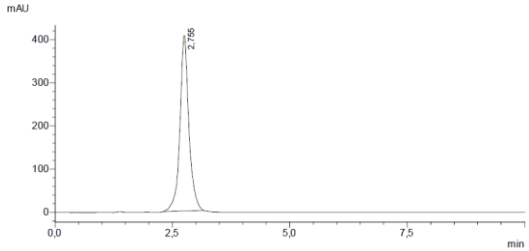


Figure S4. B. HPLC of *N*-methacryloyl-L-proline, Eluent (2): methanol: 0.02 mol/L NaH_2PO_4/water (50:50): flow rate=1.5 mL/min: t= 2.75 min.

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Copies of ^{1}H NMR spectra: comparison of starting compounds and products.

(The asterisk denotes the peaks that disappear after the hydrolysis)

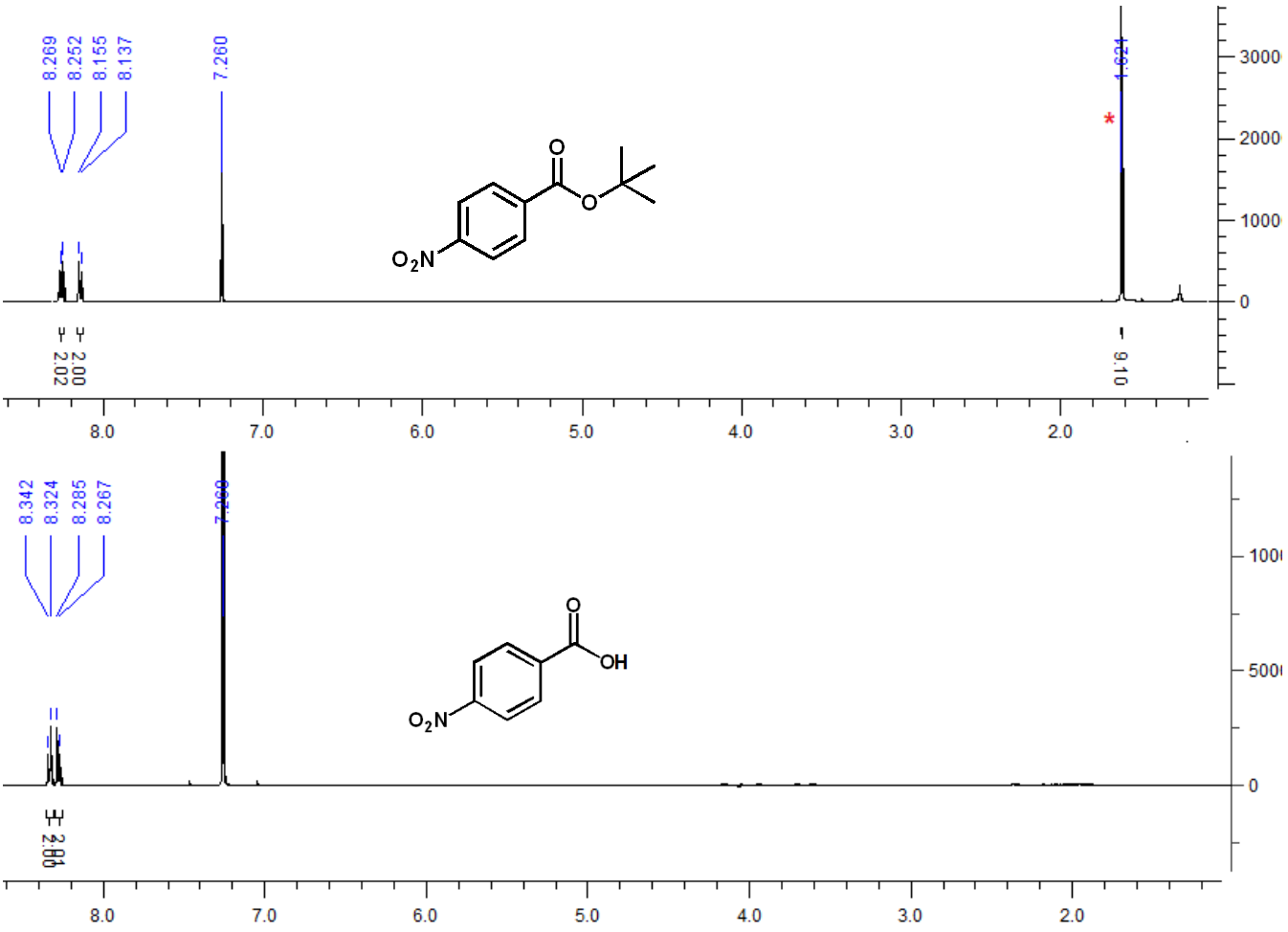


Figure S5. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of ***t*-butyl p-nitrobenzoate** and **p-nitrobenzoic acid** (**1**)

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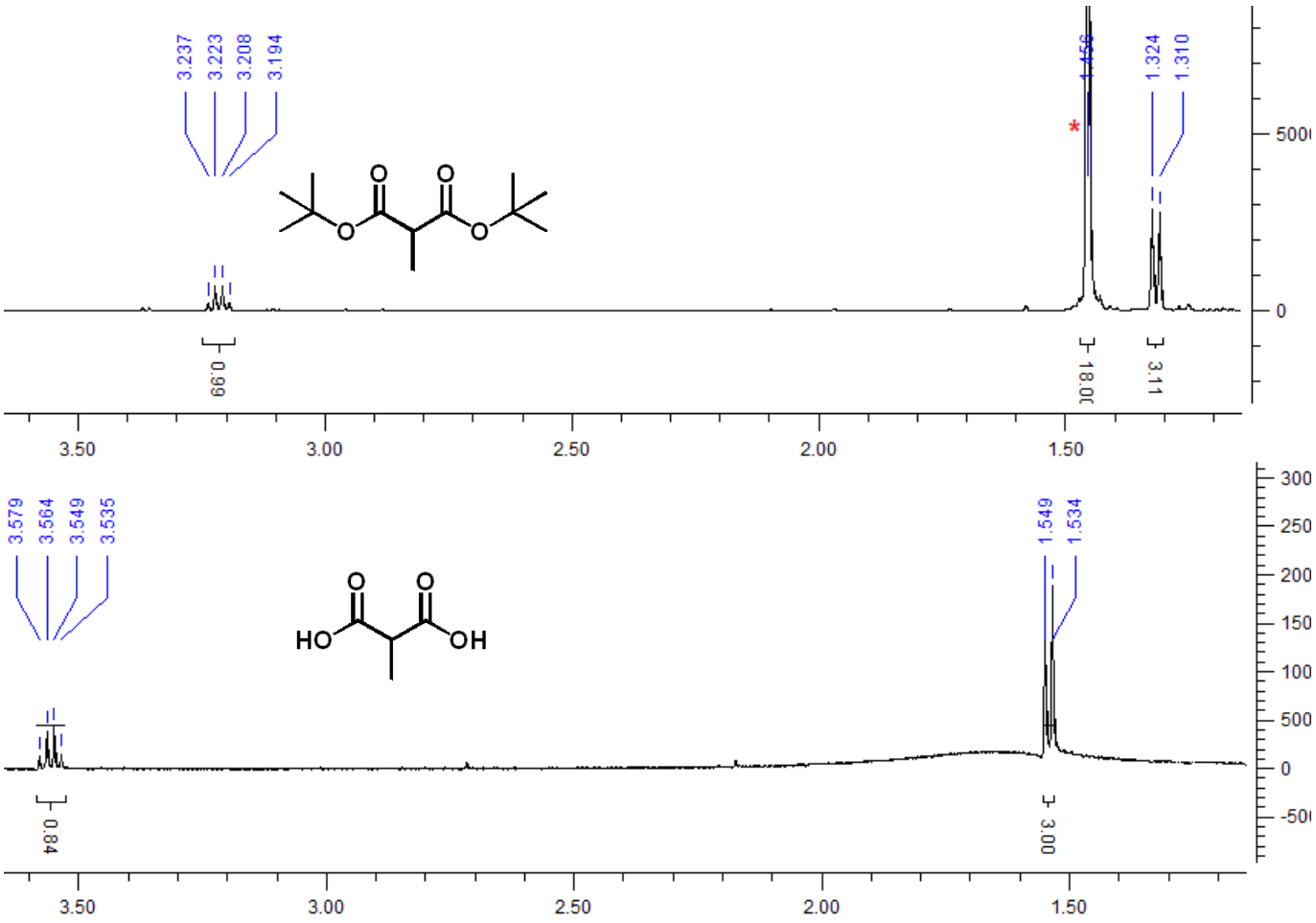


Figure S6. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **di-*t*-butyl 2-methylmalonate** and **2-methylmalonic acid** (**2**)

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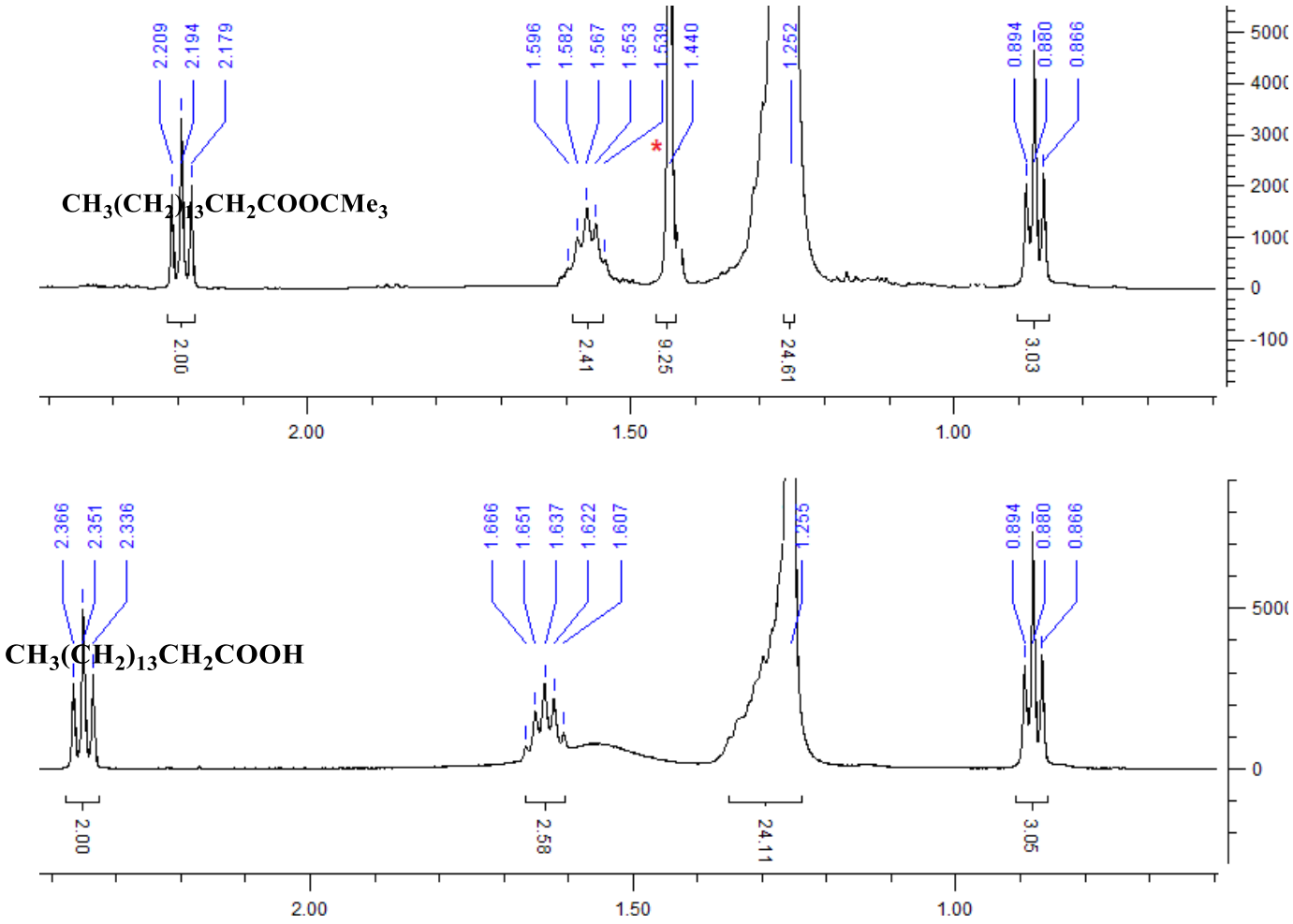


Figure S7. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of ***t*-butyl palmitate** and **palmitic acid** (**3**)

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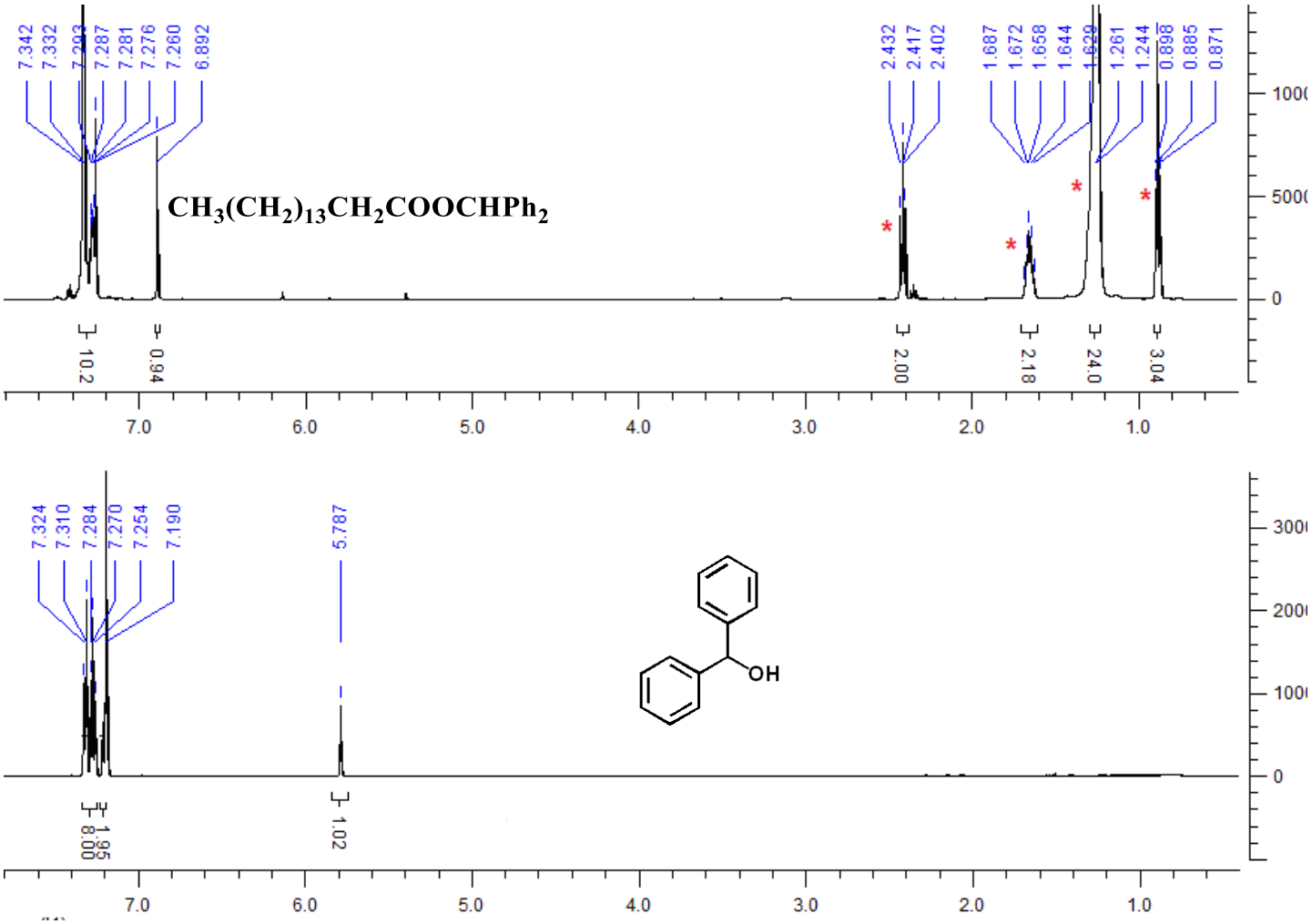


Figure S8. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **diphenylmethyl palmitate** and **diphenylmethanol** (**4**)

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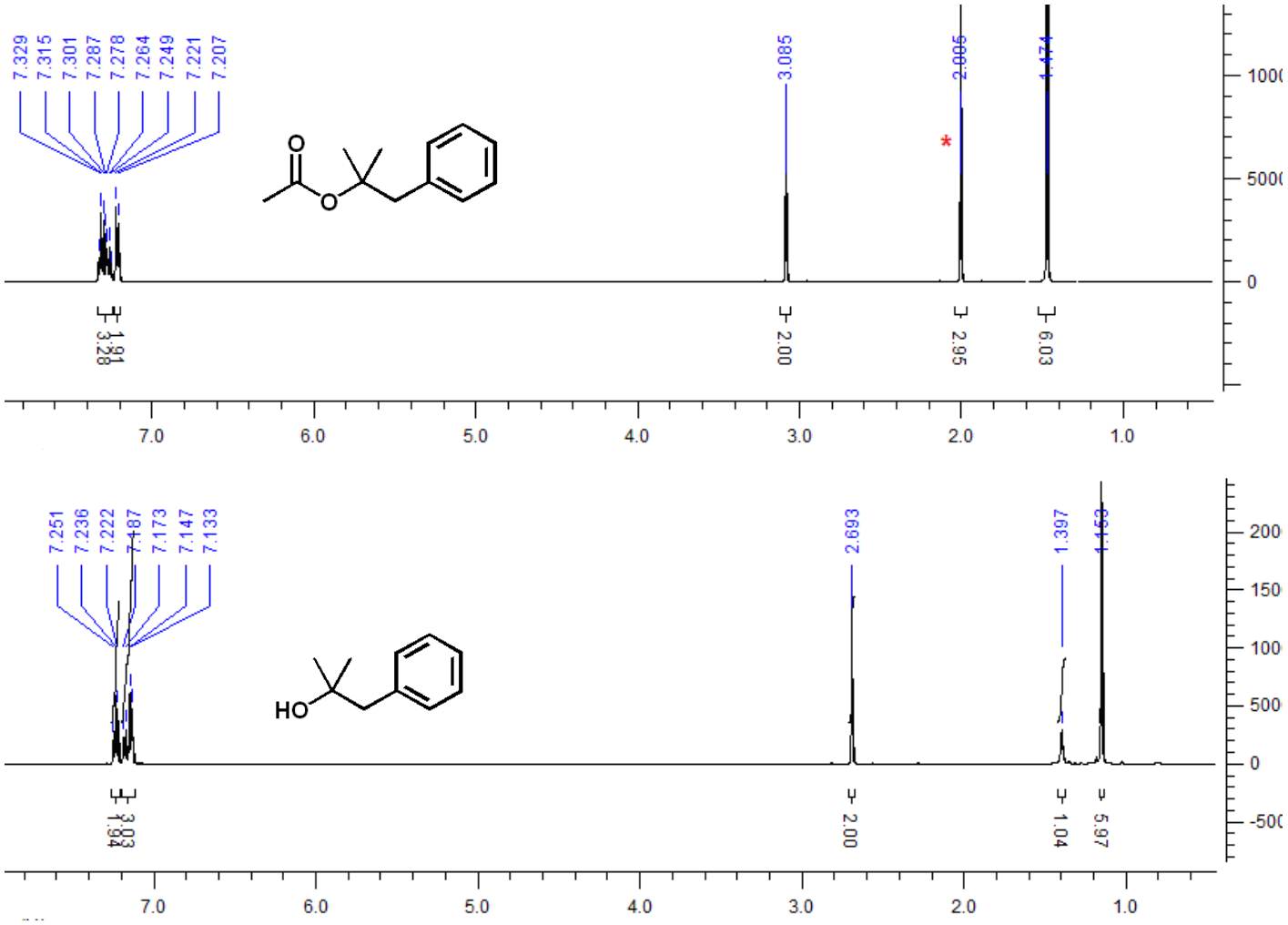


Figure S9. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **dimethylbenzylcarbinyl acetate** and **dimethylbenzylcarbinol** (**5**)

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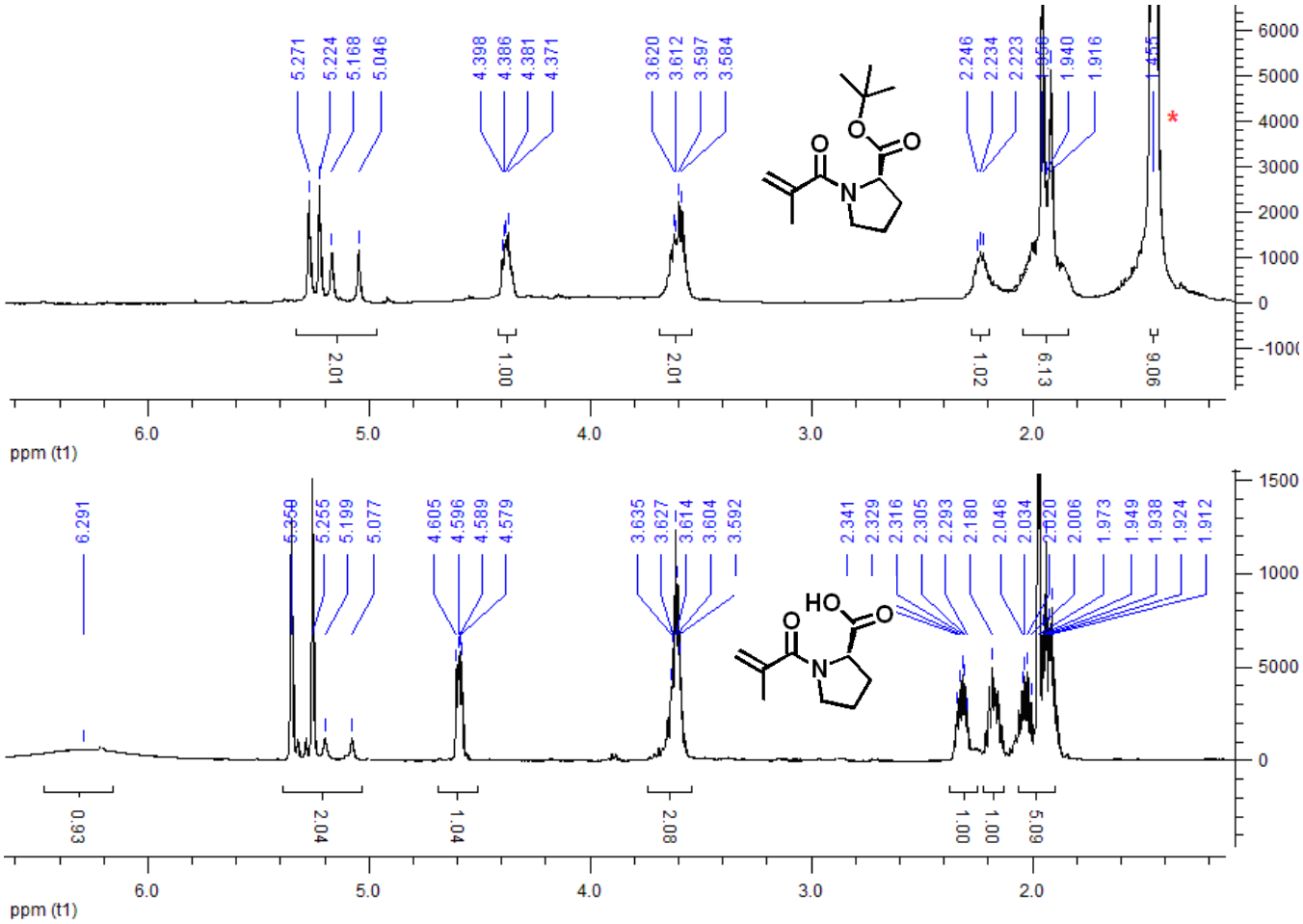


Figure S10. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **t-butyl *N*-methacryloyl-L-prolinate** and ***N*-methacryloyl-L-proline** (**8**)

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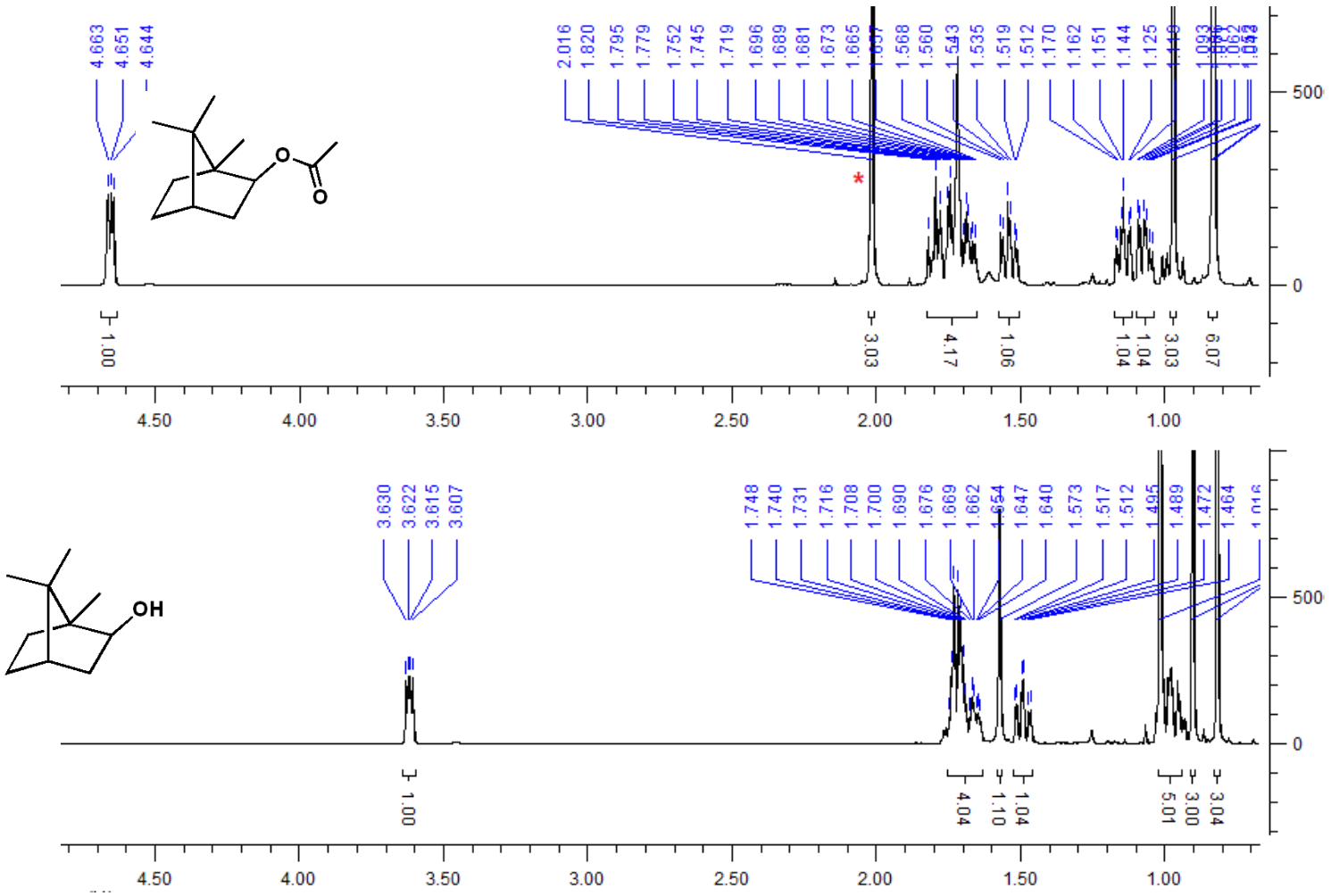


Figure S11. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **isobornyl acetate** and **isoborneol** (**9**)

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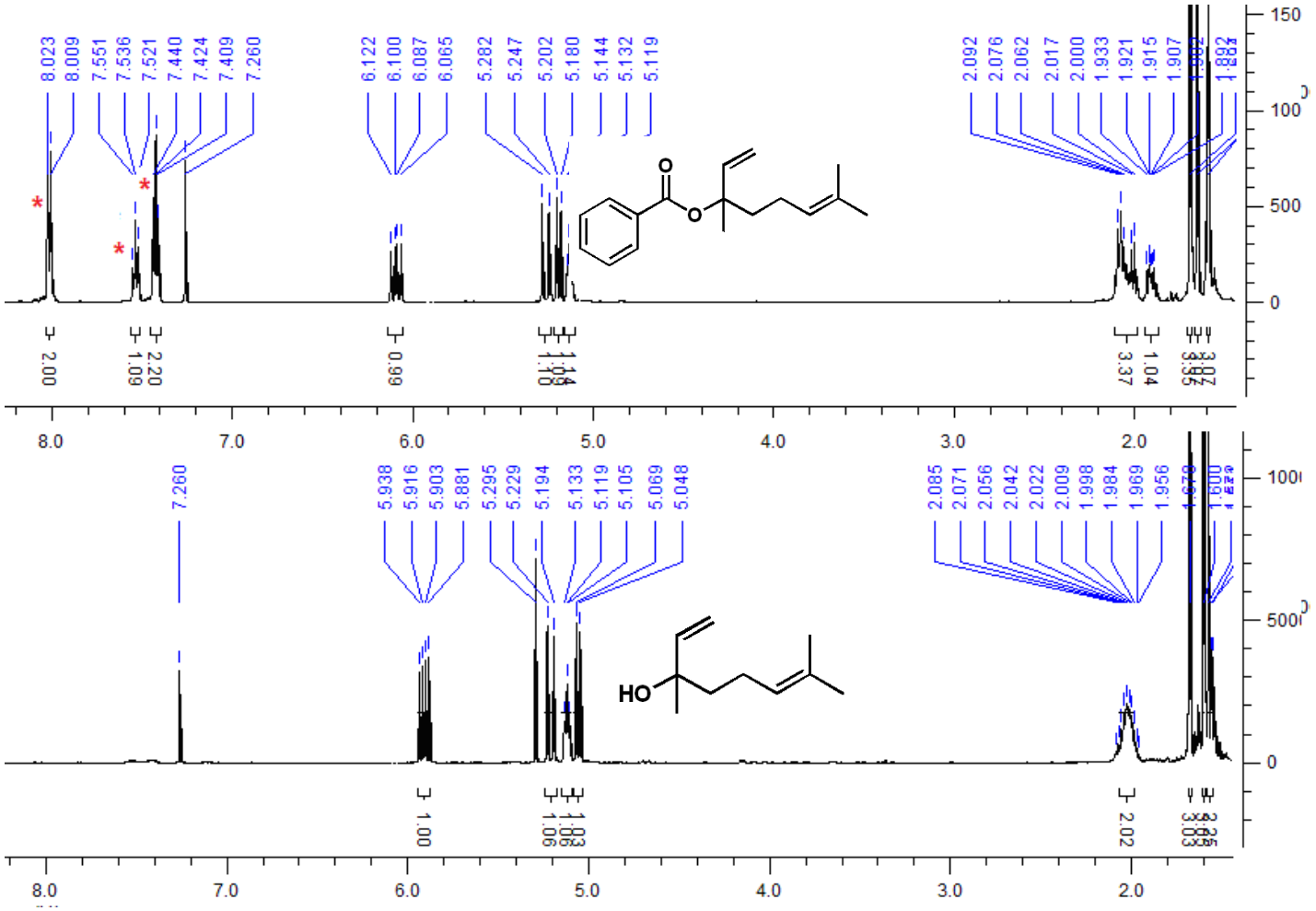


Figure S12. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **linalyl benzoate** and **linalool** (**10**)

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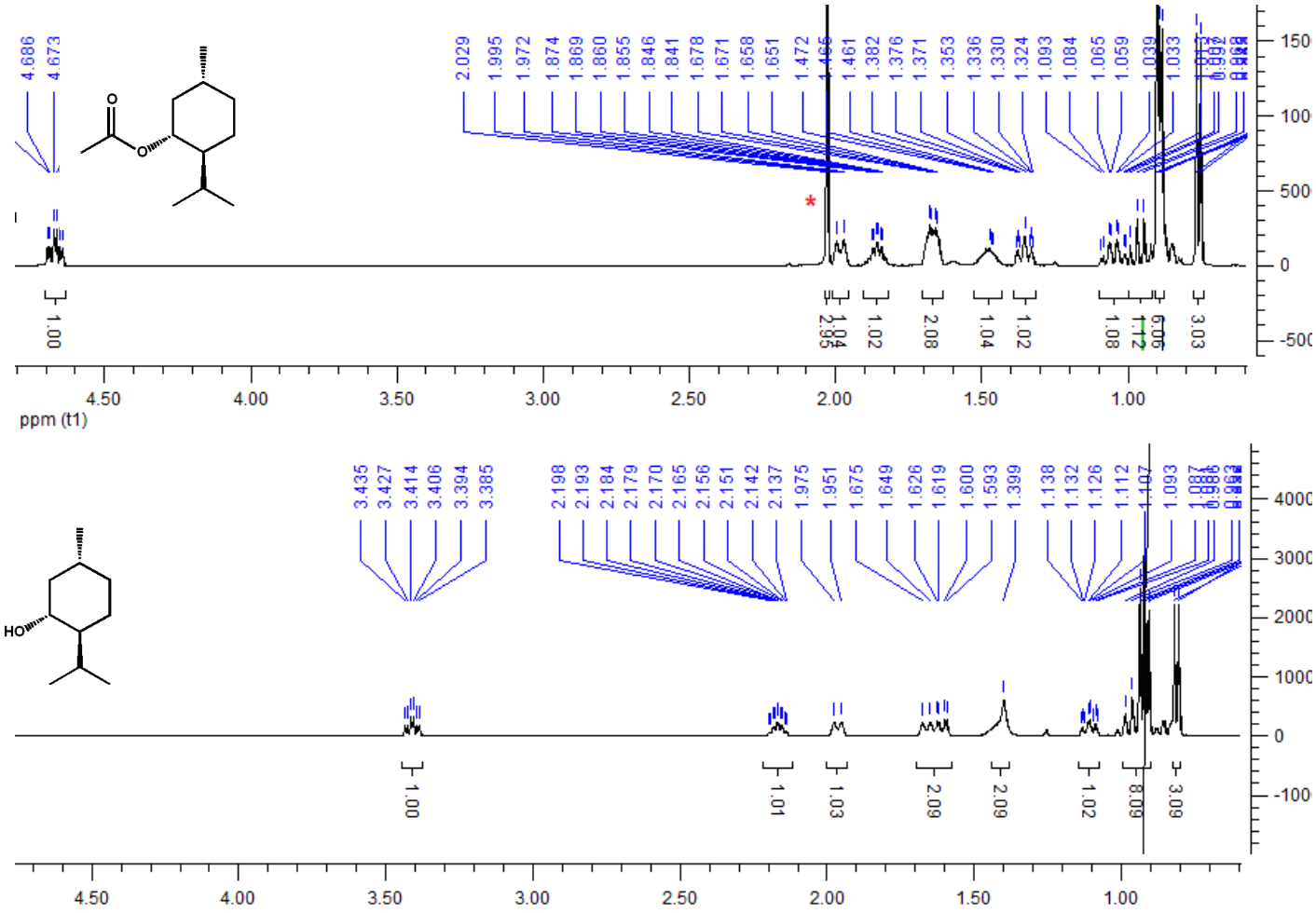


Figure S13. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **(-)-menthyl acetate** and **(-)-menthol** (**11**)

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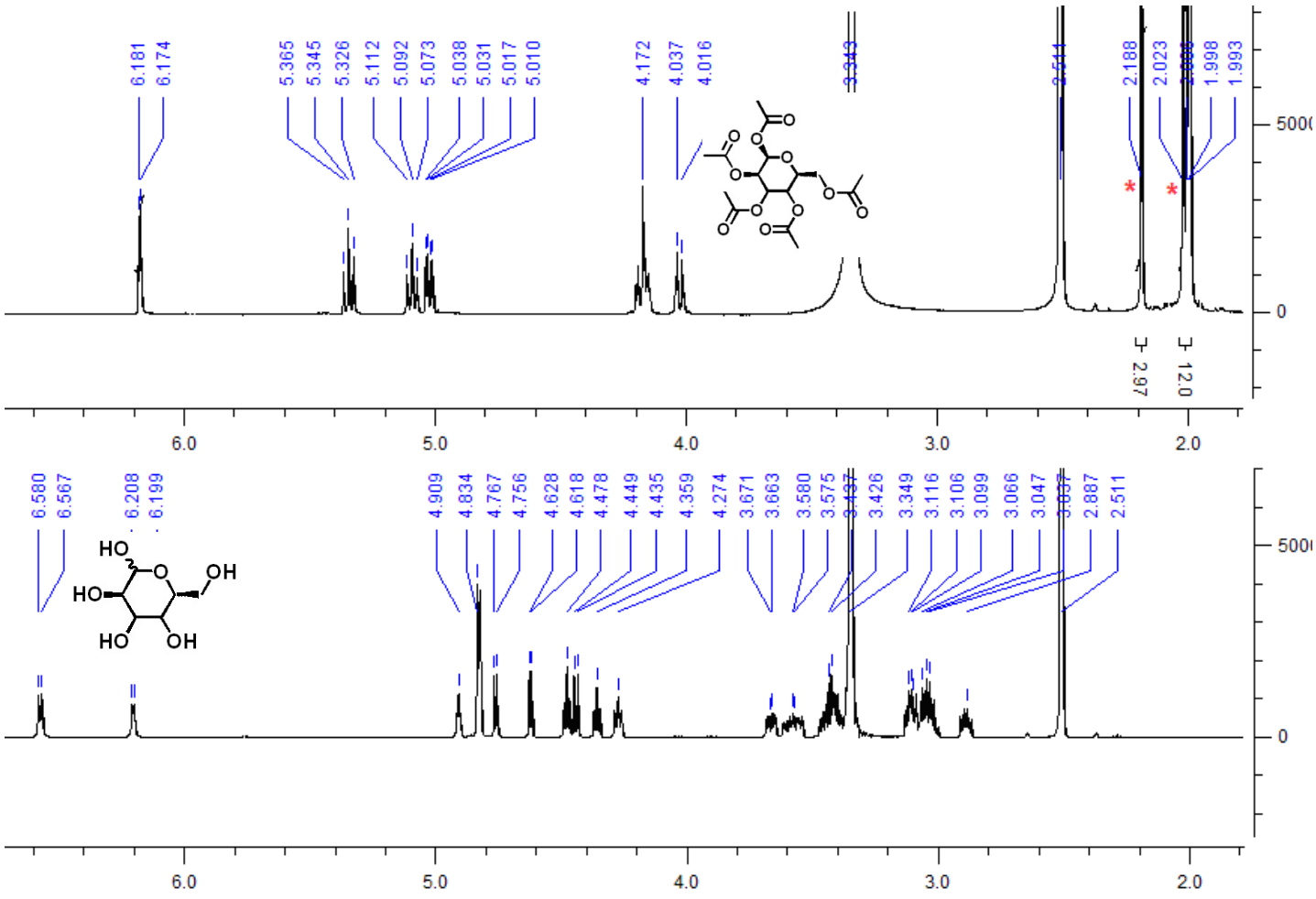


Figure S14. ^{1}H NMR (500 MHz, DMSO-d_6) spectra of **α-D(+)-glucose pentaacetate** and **D-glucose** (**12**)

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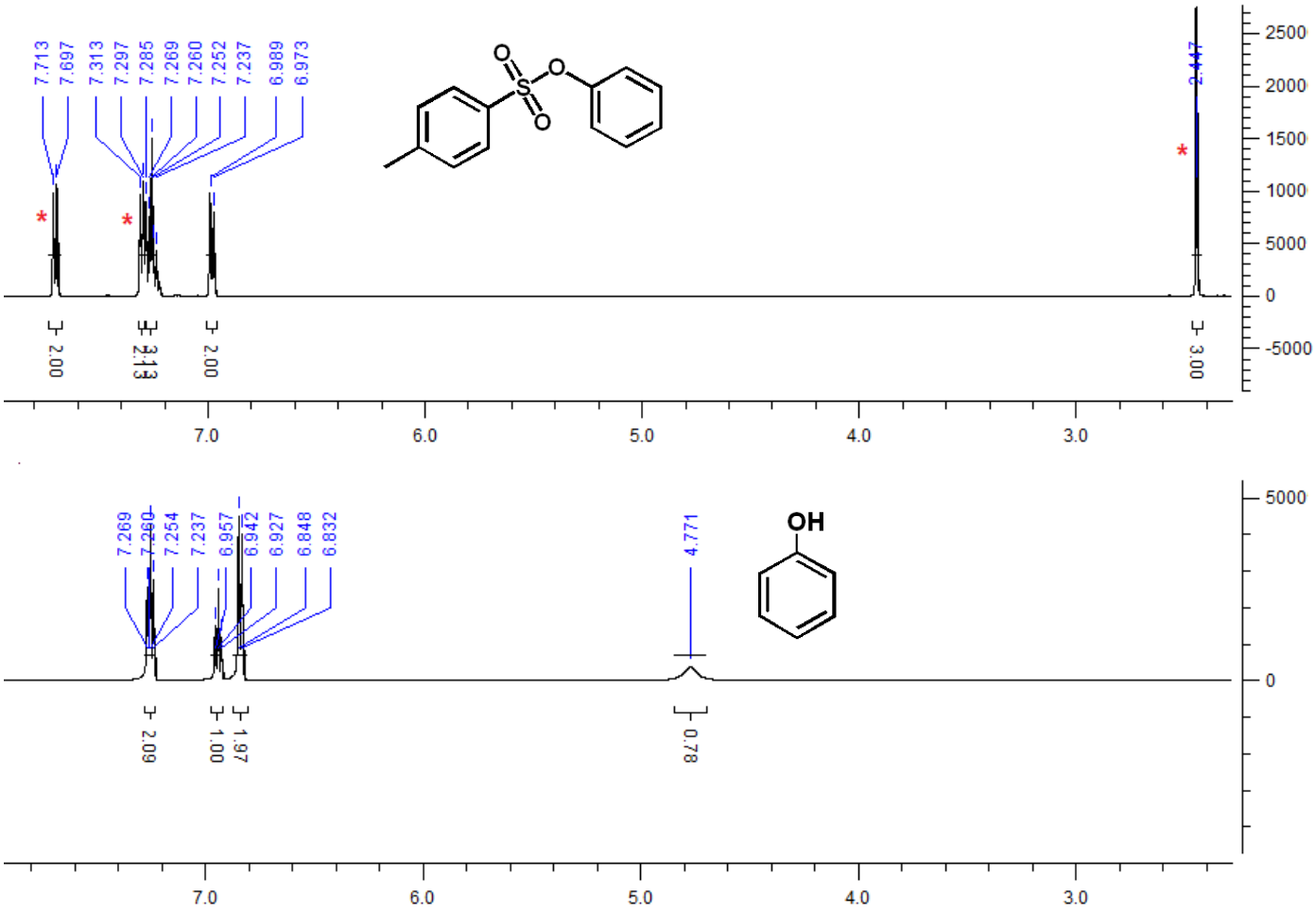


Figure S15. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of **phenyl tosylate** and **phenol** (**13**)

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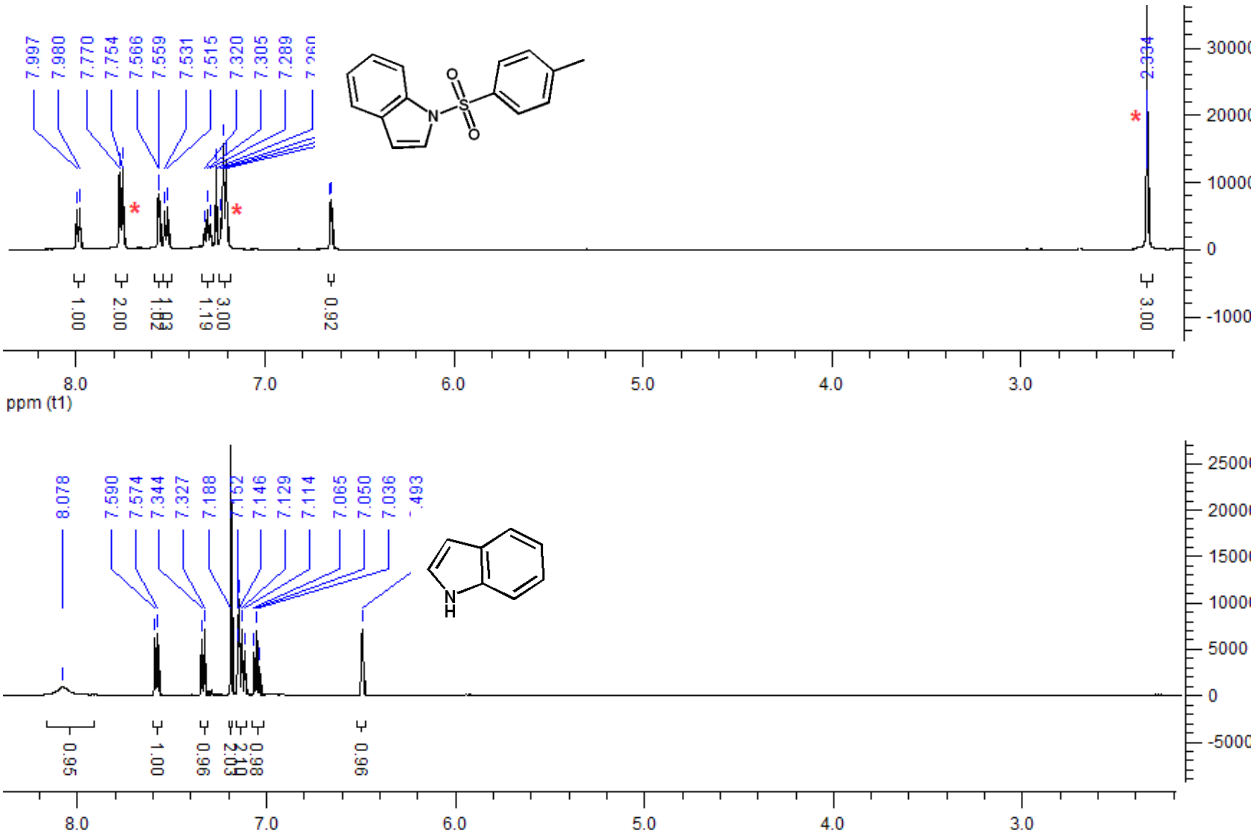


Figure S16. ^{1}H NMR (500 MHz, $CDCl_3$) spectra of ***N*-tosyl indole** and **indole** (**16**)

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