

Supporting Information

DCID-mediated Esterification of Carboxylic Acids with Alcohols under Mild Condition

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Dichloroimidazolidinedione (DCID) 2:

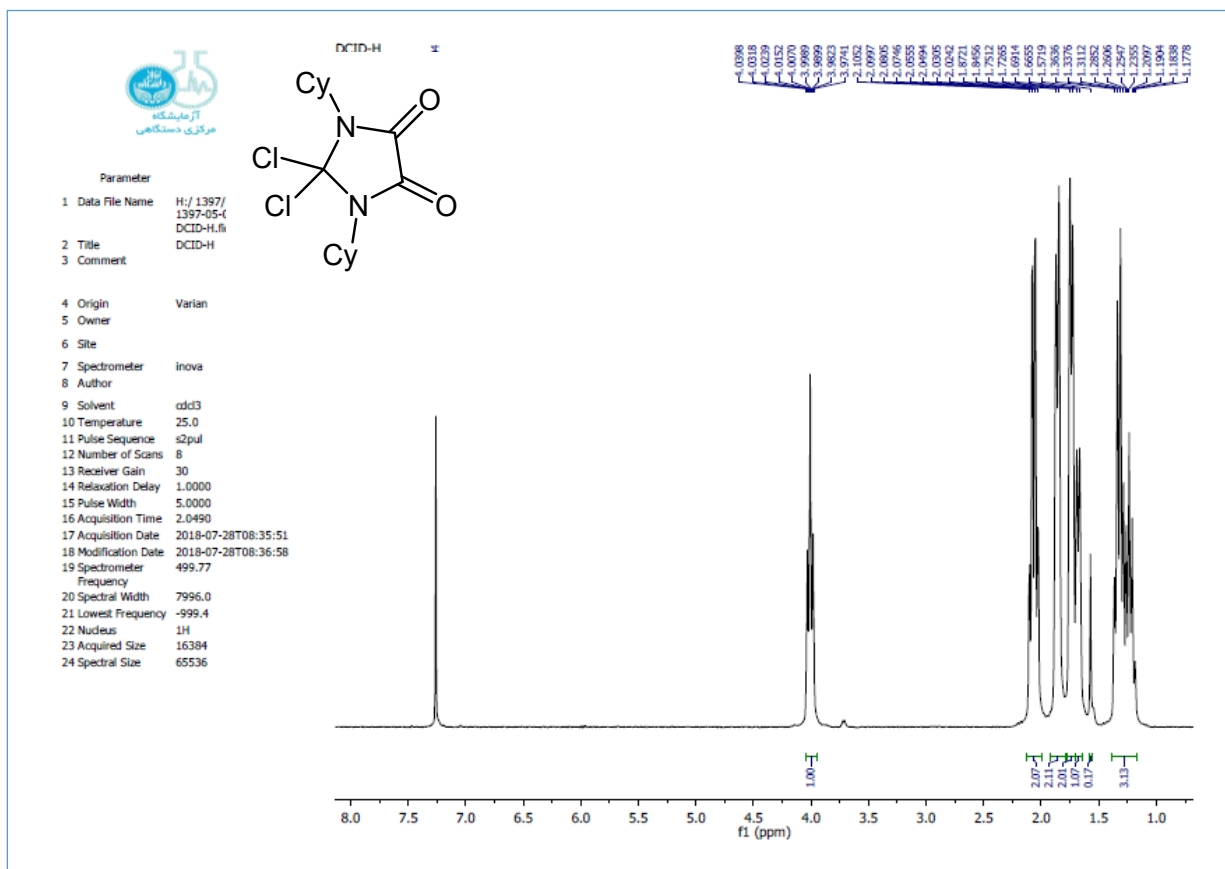


Fig. S1. $^1\text{H-NMR}$ spectra (500 MHz, CDCl_3) of DCID (2)

Dichloroimidazolidinedione (DCID) (2):

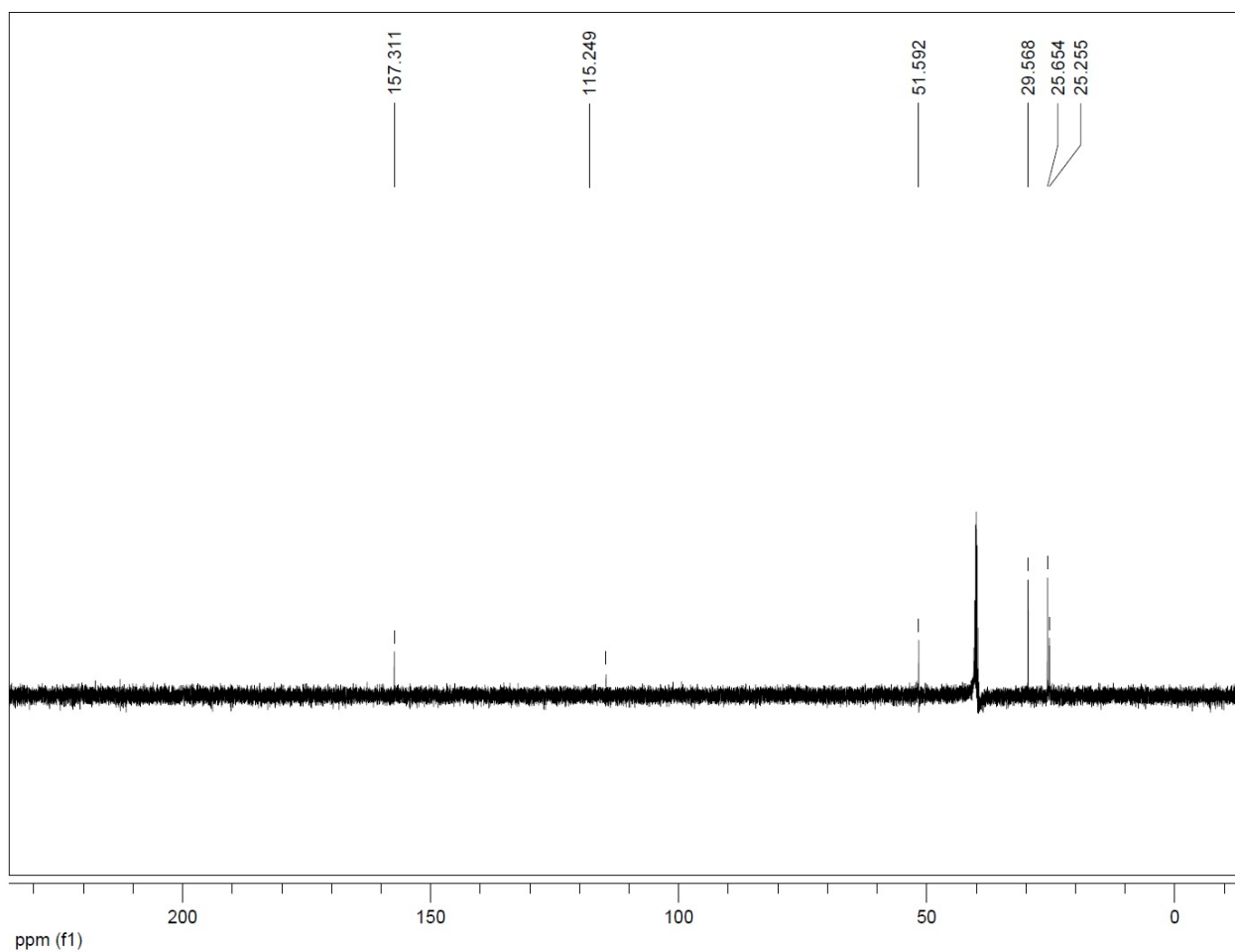
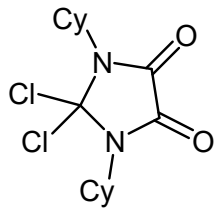


Fig. S2. ¹³C-NMR spectra (100 MHz, DMSO-d₆) of DCID

2-chloro-1,3-dicyclohexyl-4,5-dioxoimidazolidin-2-yl benzoate (3a):

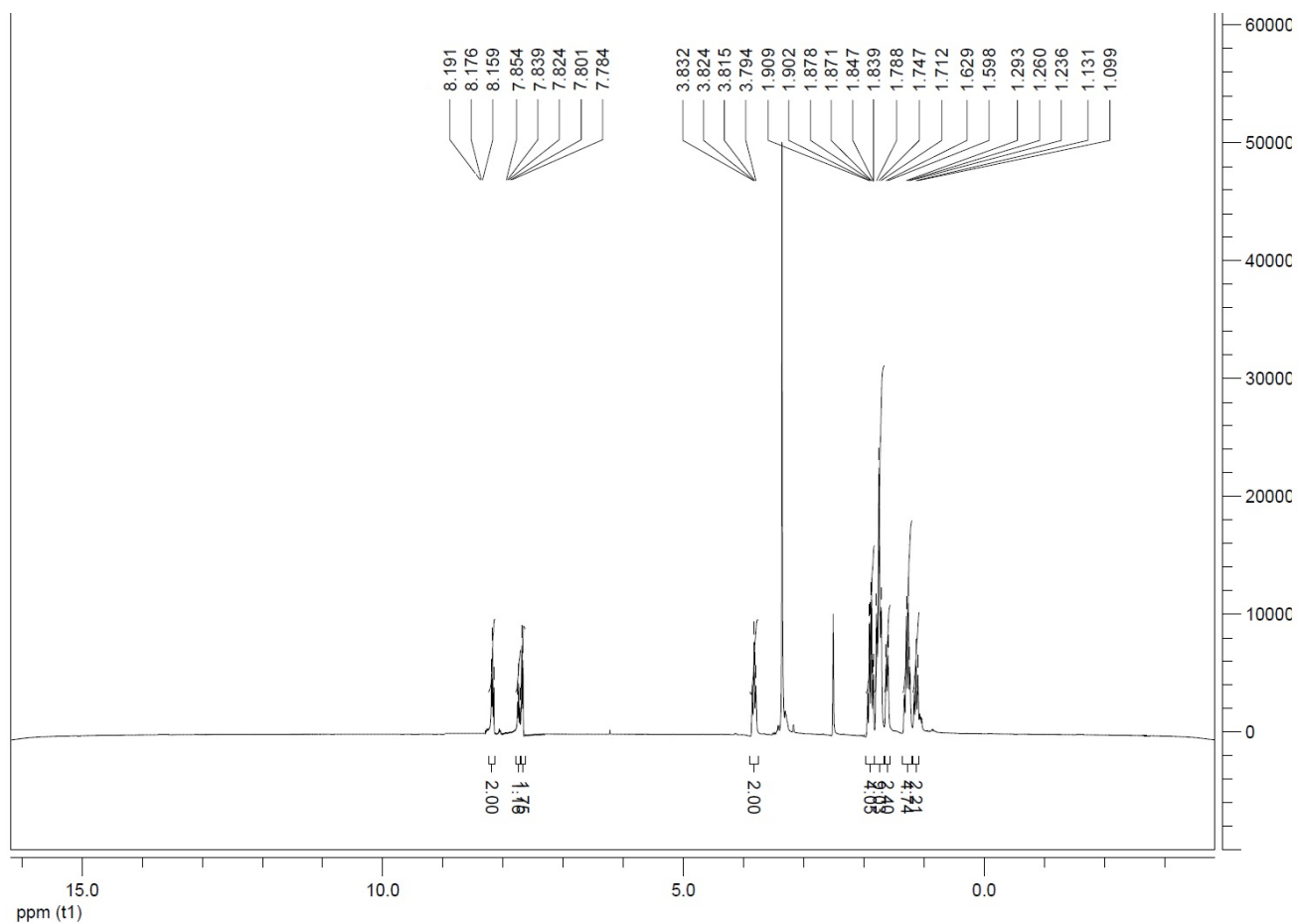
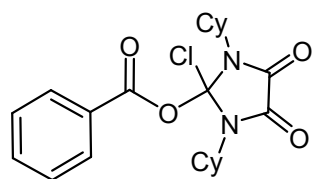


Fig. S3. $^1\text{H-NMR}$ spectra (400 MHz, DMSO-d_6) of 2-chloro-1,3-dicyclohexyl-4,5-dioxoimidazolidin-2-yl benzoate

2-chloro-1,3-dicyclohexyl-4,5-dioximidazolidin-2-yl benzoate (3a):

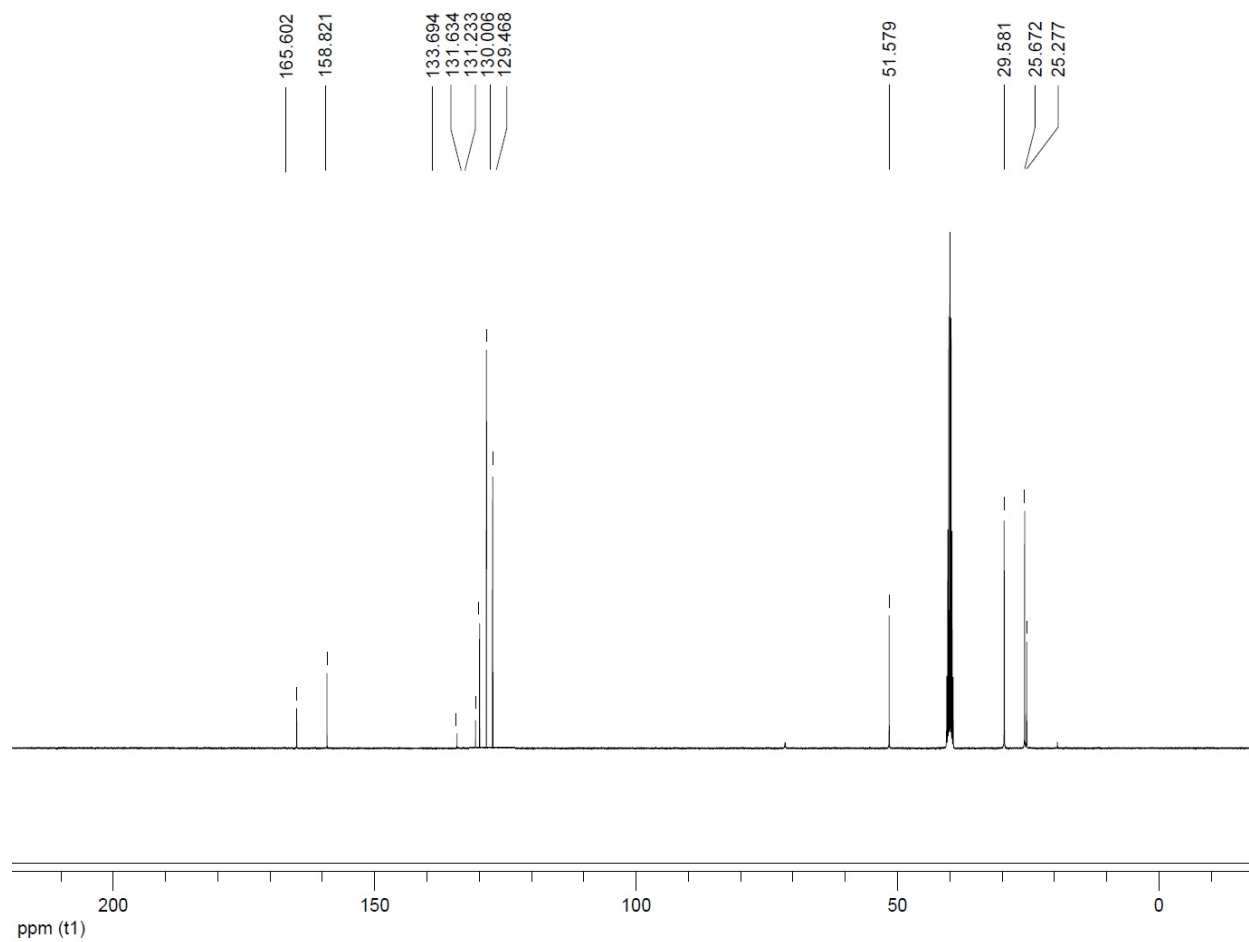
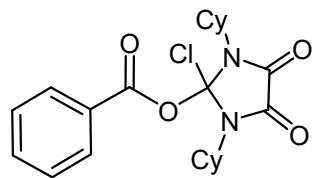


Fig. S4. ^{13}C -NMR spectra (100 MHz, DMSO-d_6) of 2-chloro-1,3-dicyclohexyl-4,5-dioximidazolidin-2-yl benzoate

Benzyl benzoate (5a):

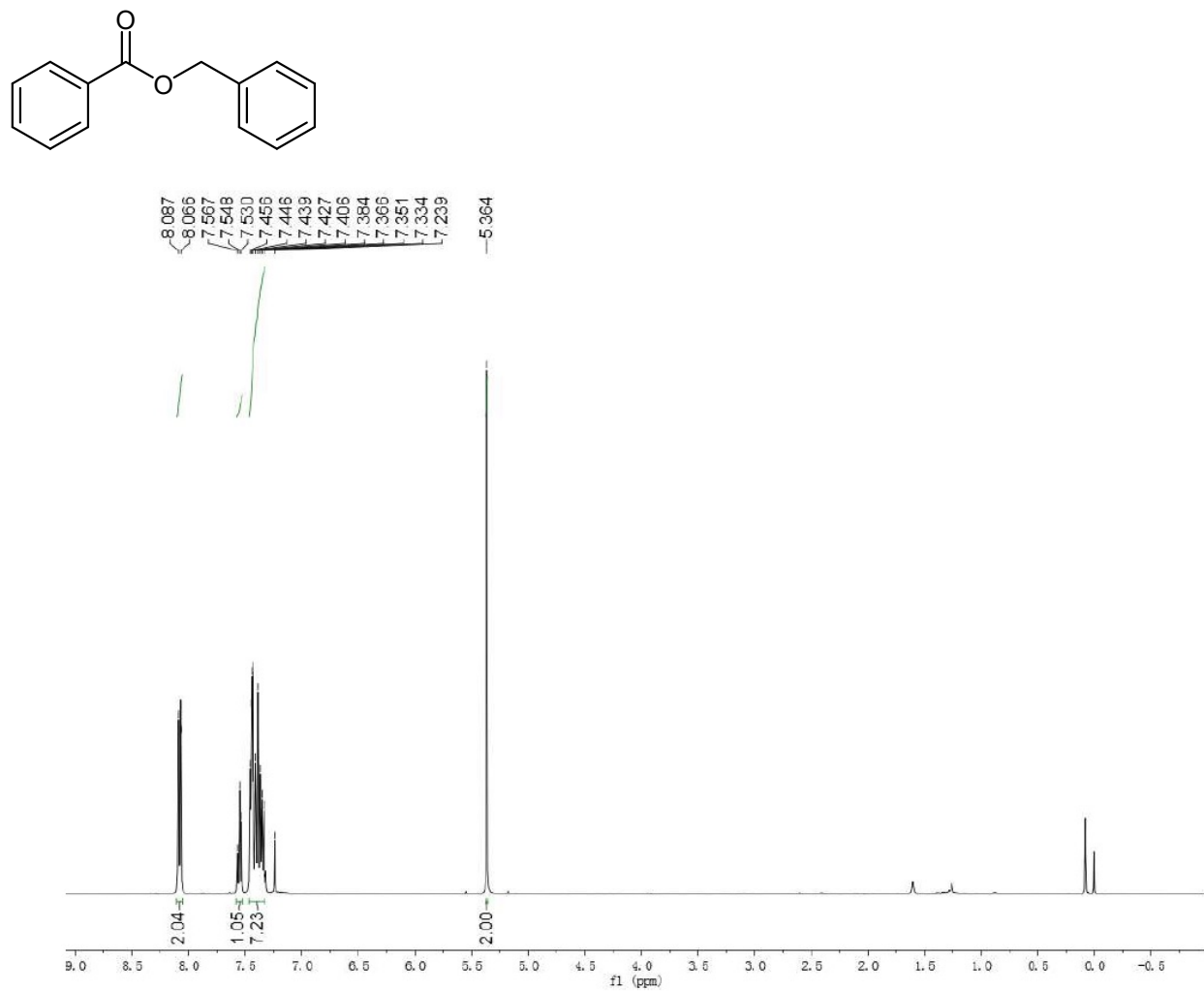


Fig. S5. ¹H-NMR spectra (400 MHz, CDCl₃) of benzyl benzoate

Benzyl benzoate (5a):

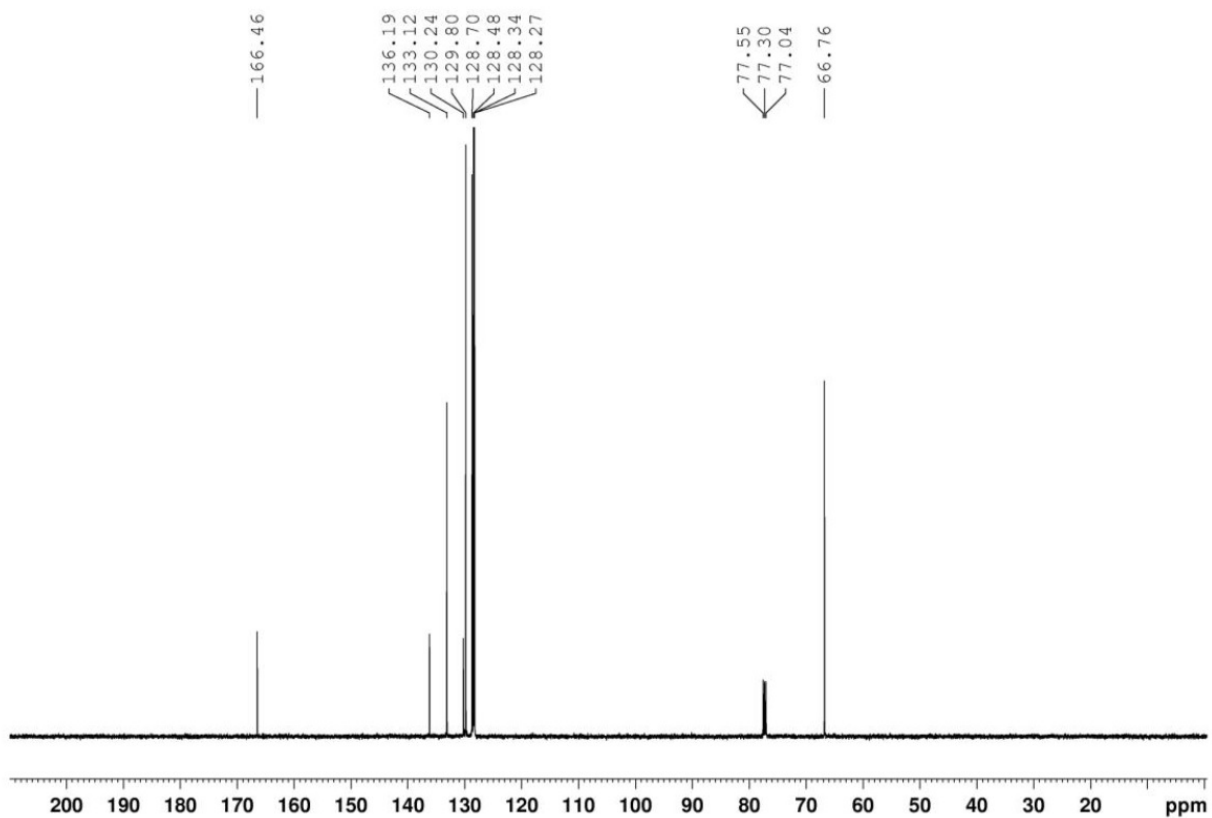
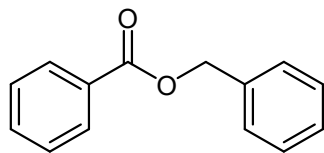


Fig. S6. ^{13}C -NMR spectra (100 MHz, CDCl_3) of benzyl benzoate

2-Fluorobenzyl benzoate (5d):

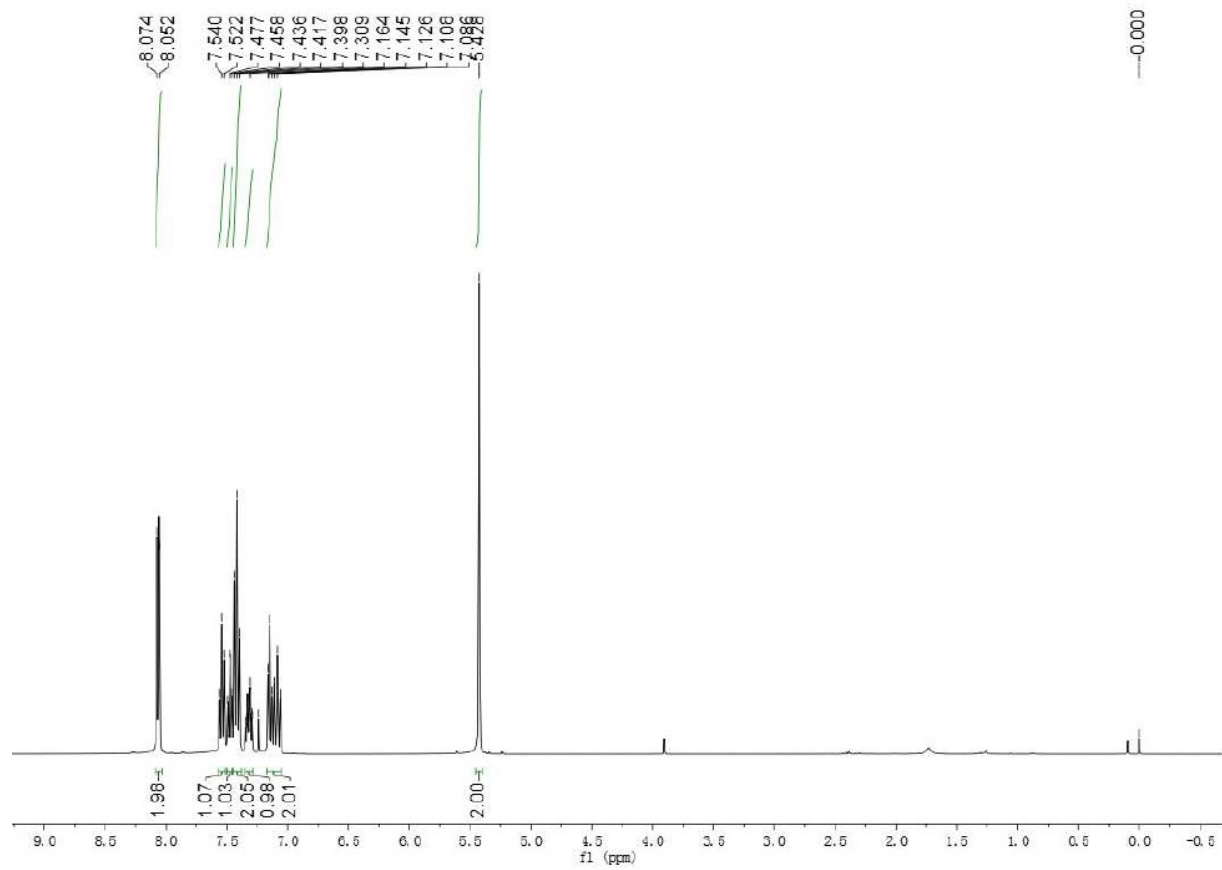
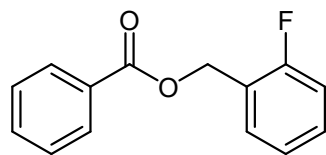


Fig. S7. ¹H-NMR spectra of (400 MHz, CDCl₃) 2-Fluorobenzyl benzoate

Ethyl benzoate (5f):

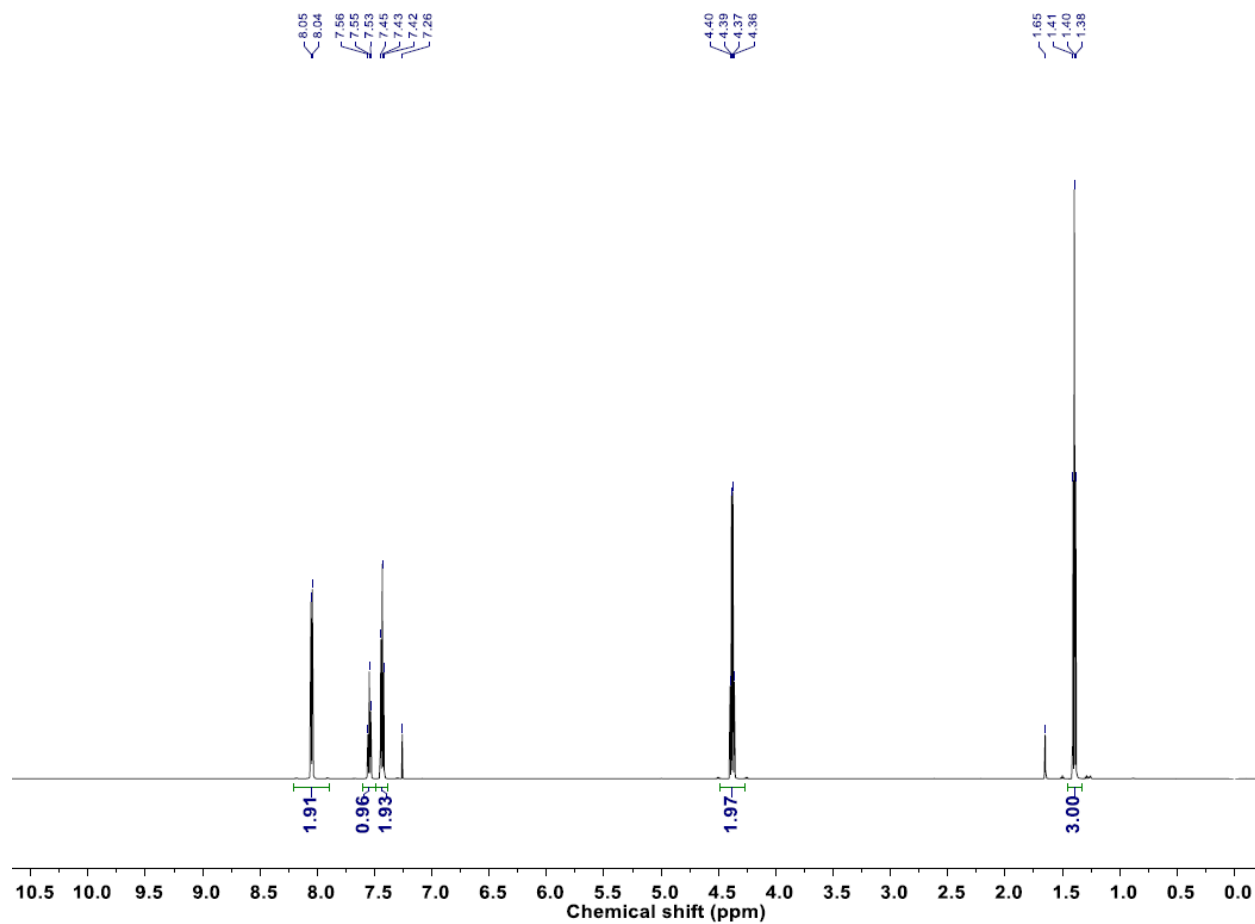
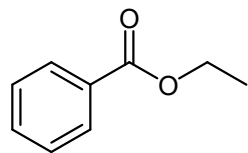


Fig. S8. $^1\text{H-NMR}$ spectra (500 MHz, CDCl_3) of Benzyl benzoate

4-Chlorobenzyl 4-bromobenzoate (5i):

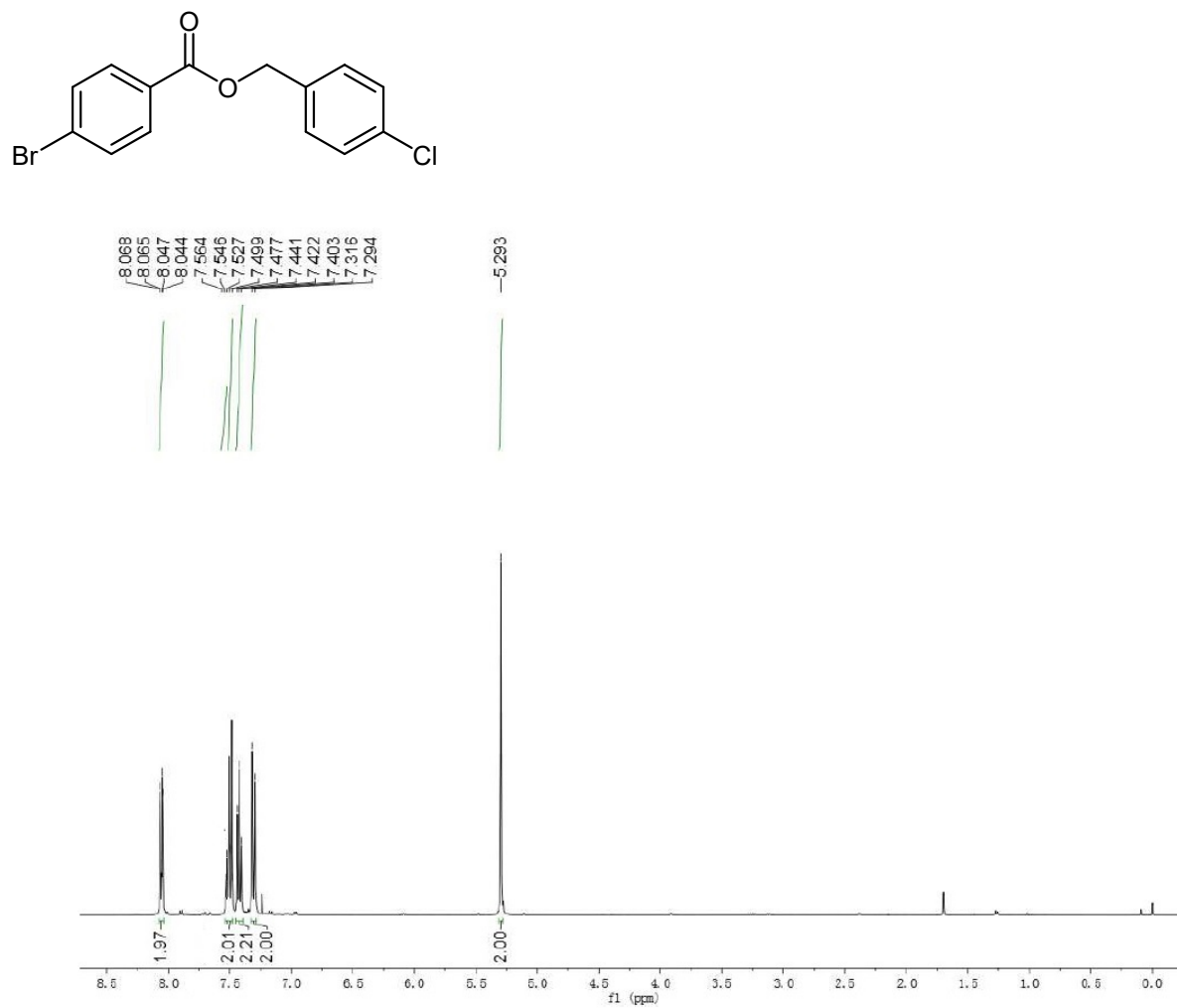


Fig. S9. ¹H-NMR spectra (400 MHz, CDCl₃) of 4-Chlorobenzyl 4-bromobenzoate

2-Fluorobenzyl 4-bromobenzoate (5j):

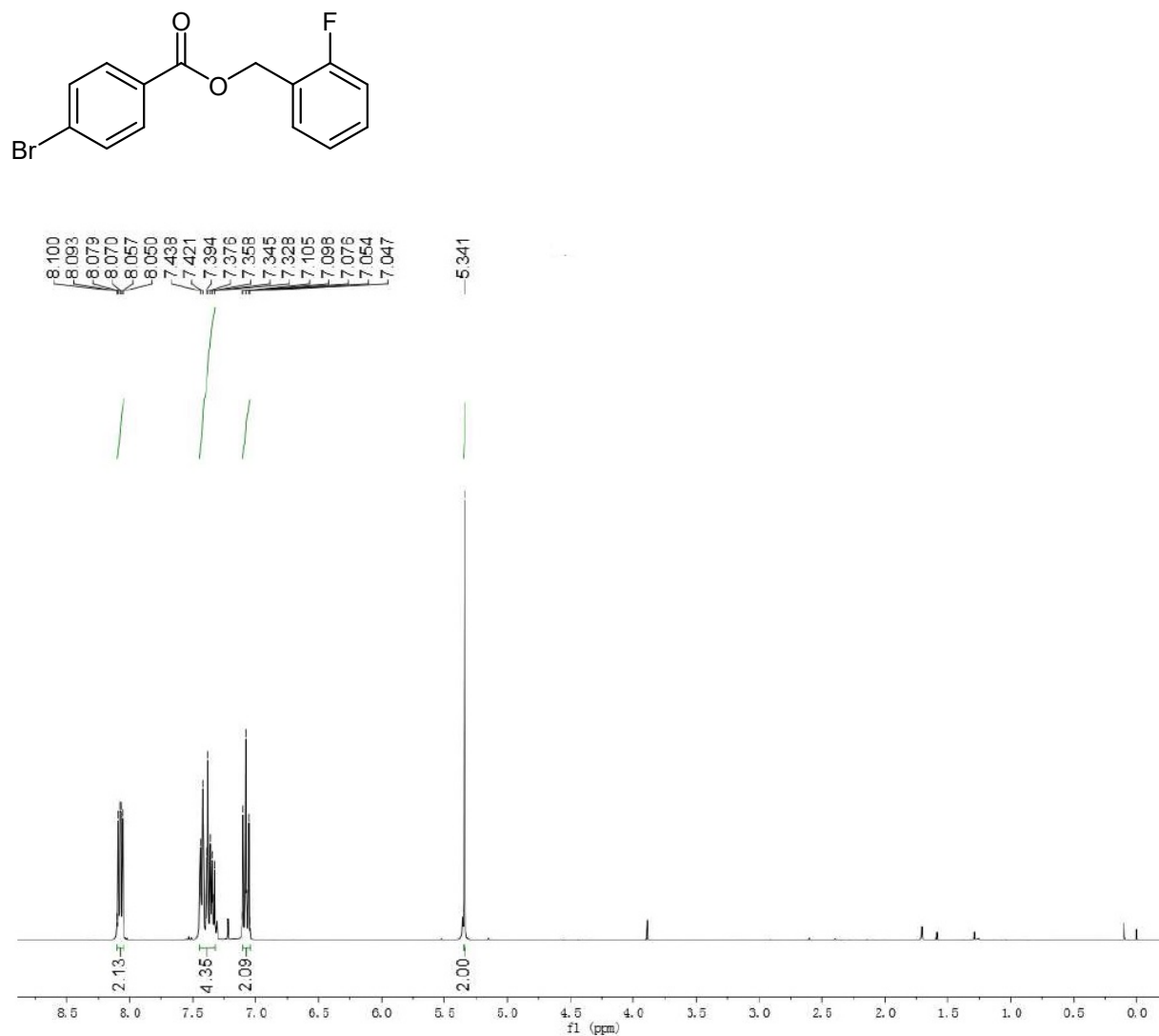


Fig. S10. ¹H-NMR spectra (400 MHz, CDCl₃) of 2-Fluorobenzyl 4-bromobenzoate

Benzyl 3-methylbenzoate (5k):

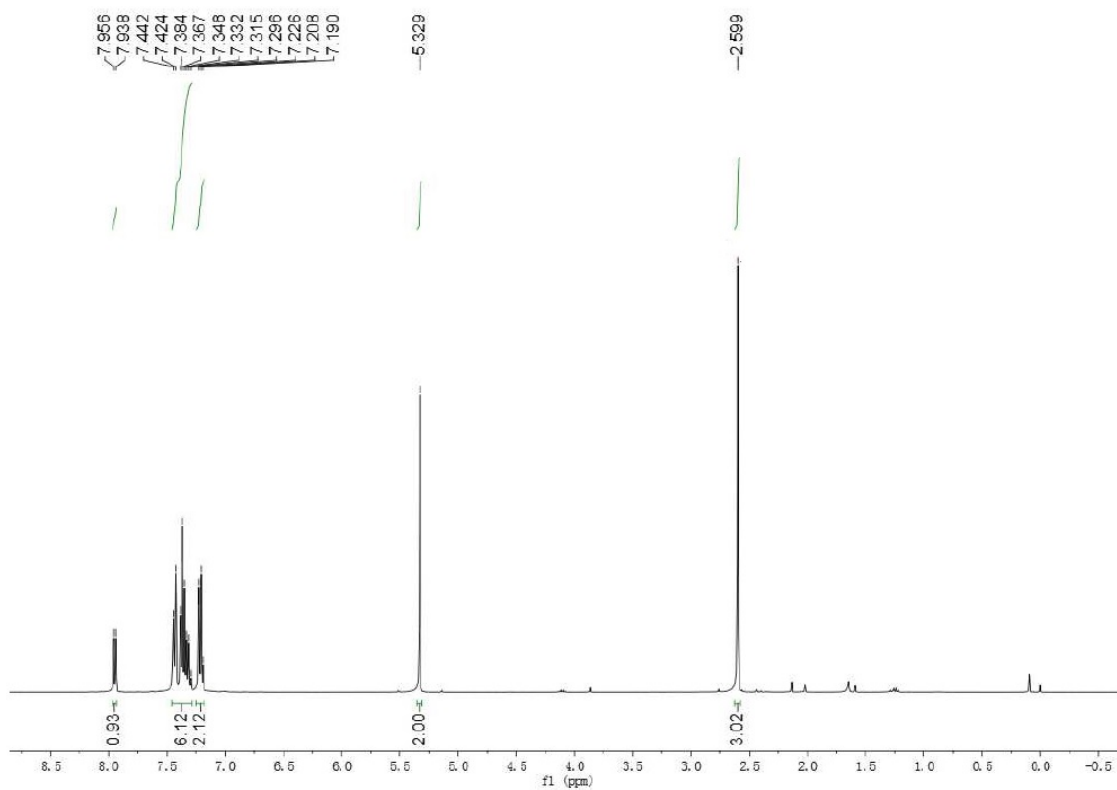
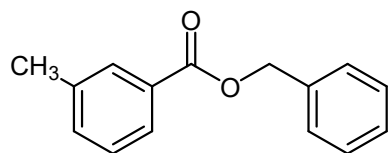


Fig. S11. $^1\text{H-NMR}$ spectra (400 MHz, CDCl_3) of Benzyl 3-methylbenzoate

4-Chlorobenzyl 3-methylbenzoate (5m):

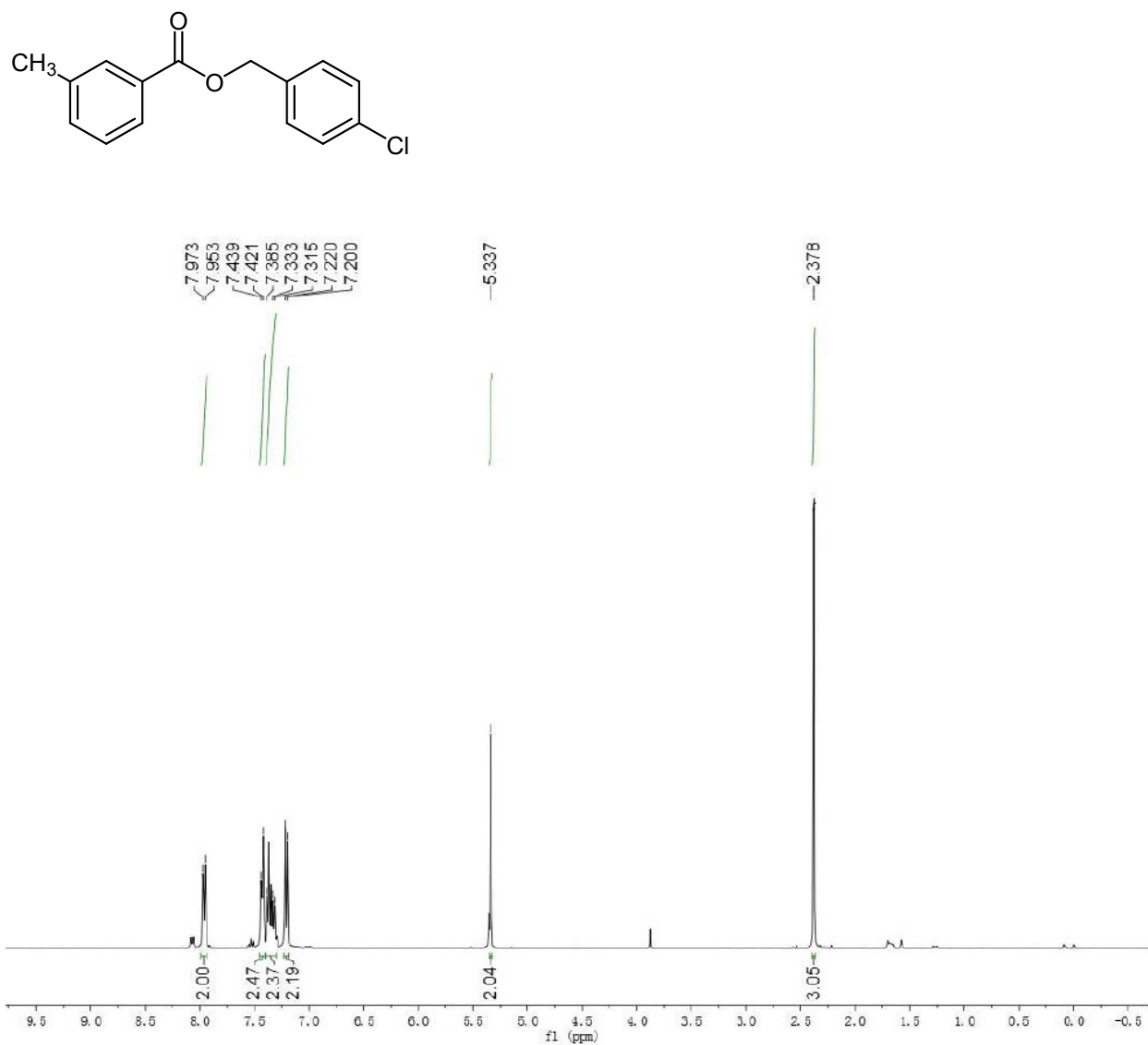


Fig. S12. ¹H-NMR spectra (400 MHz, CDCl₃) of 4-Chlorobenzyl 3-methylbenzoate

2-Fluorobenzyl 3-methylbenzoate (5n)

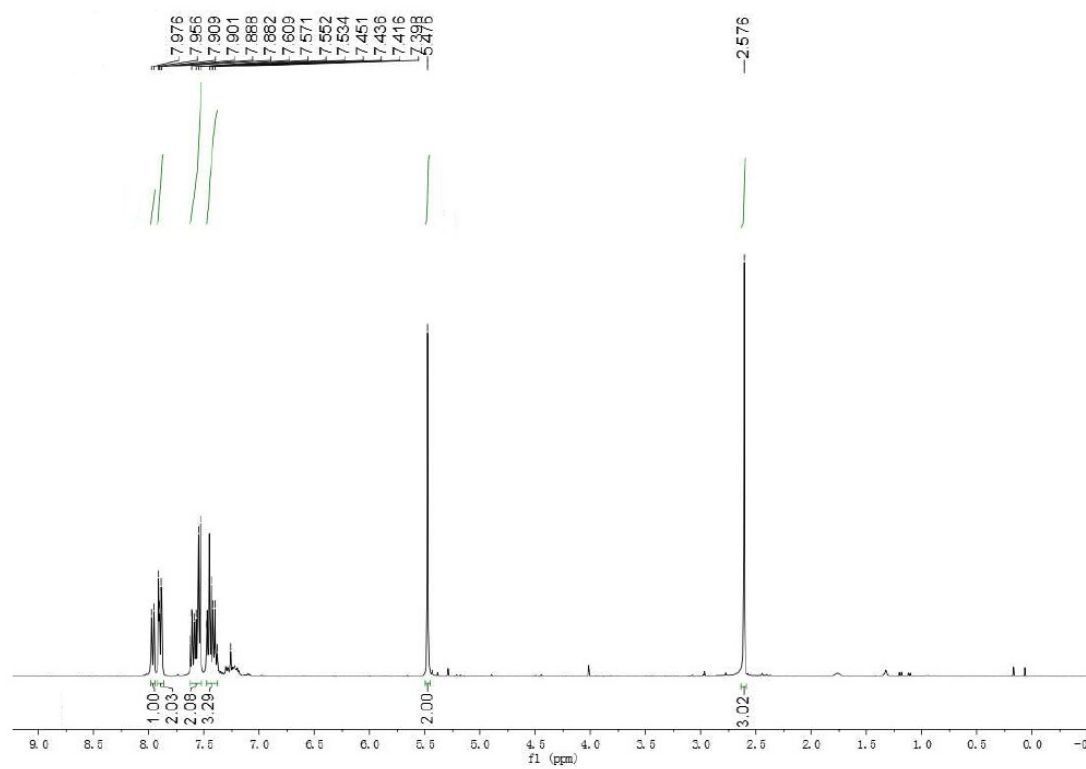
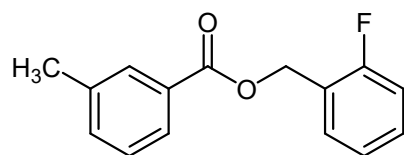


Fig. S13. $^1\text{H-NMR}$ spectra (400 MHz, CDCl_3) of 2-Fluorobenzyl 3-methylbenzoate

Benzyl acetate (5s)

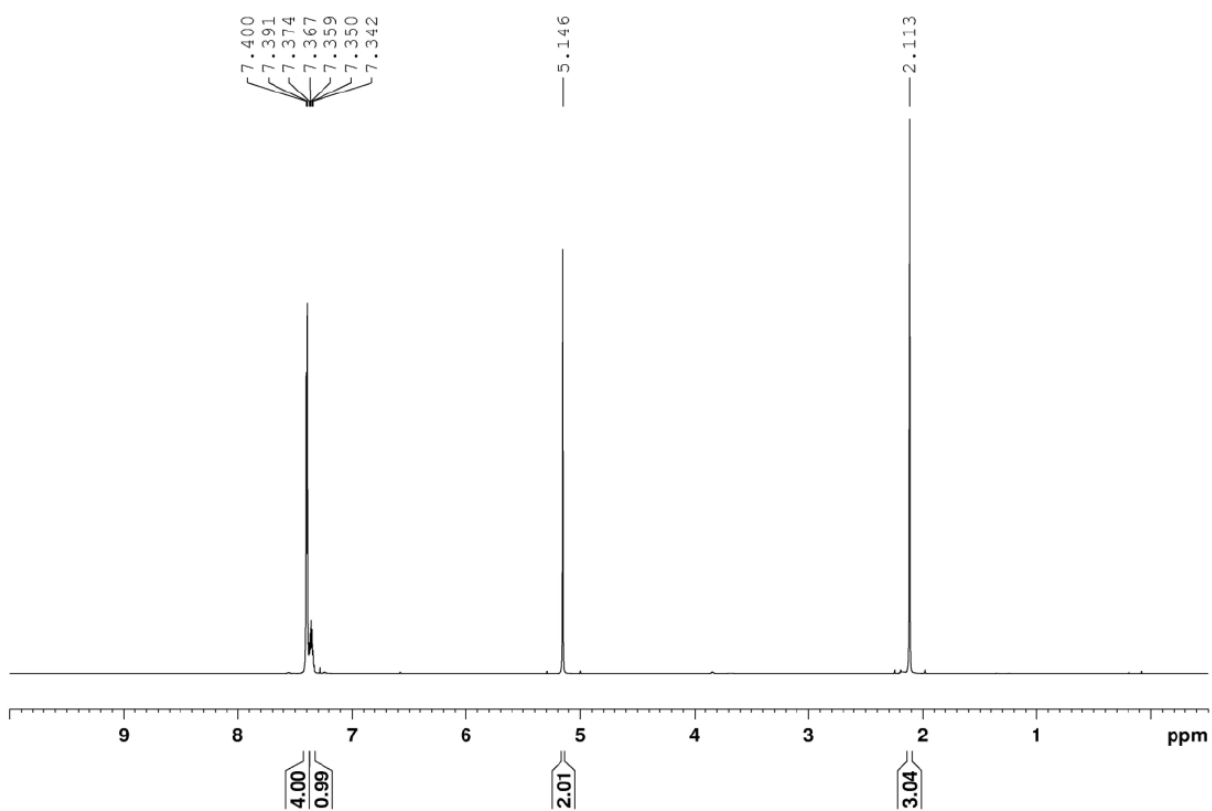
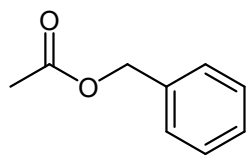


Fig. S14. ¹H-NMR spectra (400 MHz, CDCl₃) of benzyl acetate

Benzyl propionate (5t)

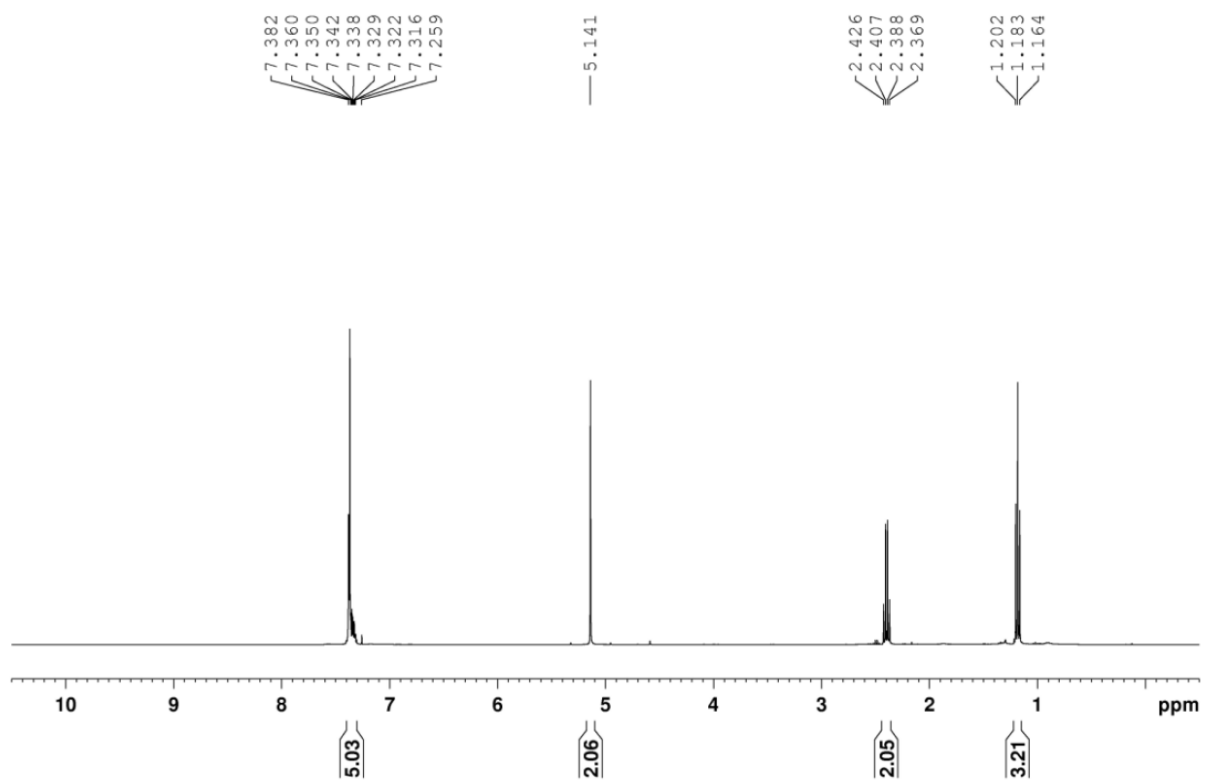
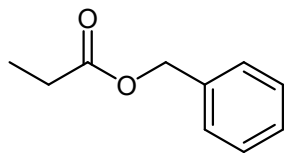


Fig. S15. ¹H-NMR spectra (400 MHz, CDCl₃) of benzyl propionate

1,3-Dicyclohexylimidazolidine-2,4,5-trione (DCIT) :

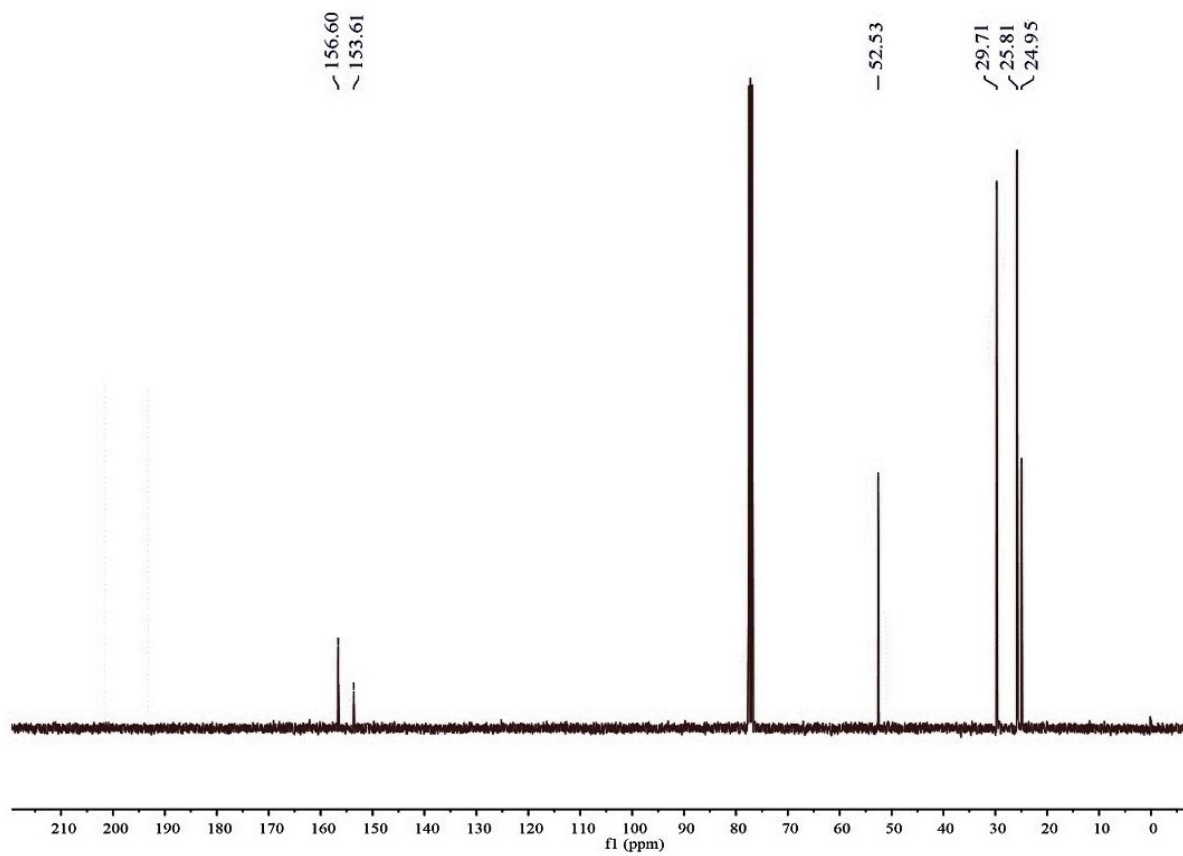
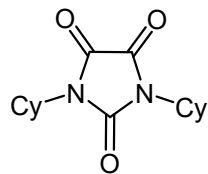
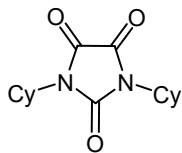


Fig. S16. ¹H-NMR spectra (400 MHz, CDCl₃) of DCIT 7

1,3-Dicyclohexylimidazolidine-2,4,5-trione (DCIT):



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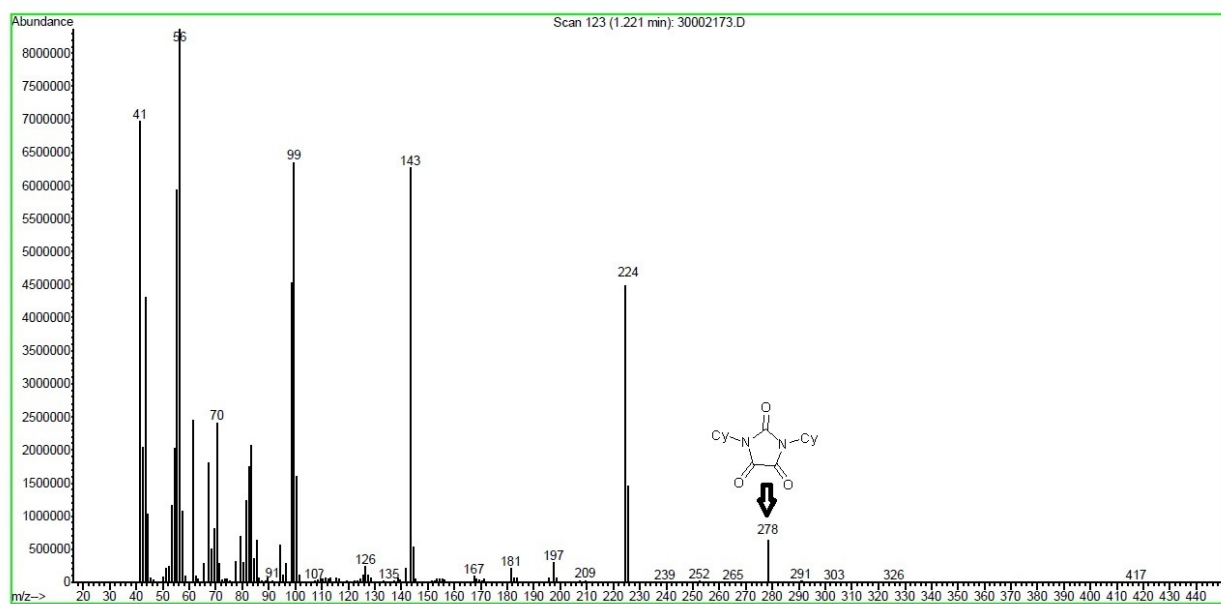


Fig. S17. Mass spectra of DCIT 7