

Supporting Information

Large scale synthesis of chiral (3Z,5Z)-2,7-dihydro-1H-azepine-derived Hamari ligand for general asymmetric synthesis of tailor-made amino acids.

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1. Copies of ^1H , ^{13}C and ^{19}F -NMR spectra

Figure S1. ^1H -NMR (400 MHz, CDCl_3) of (*S*)-16 TFA

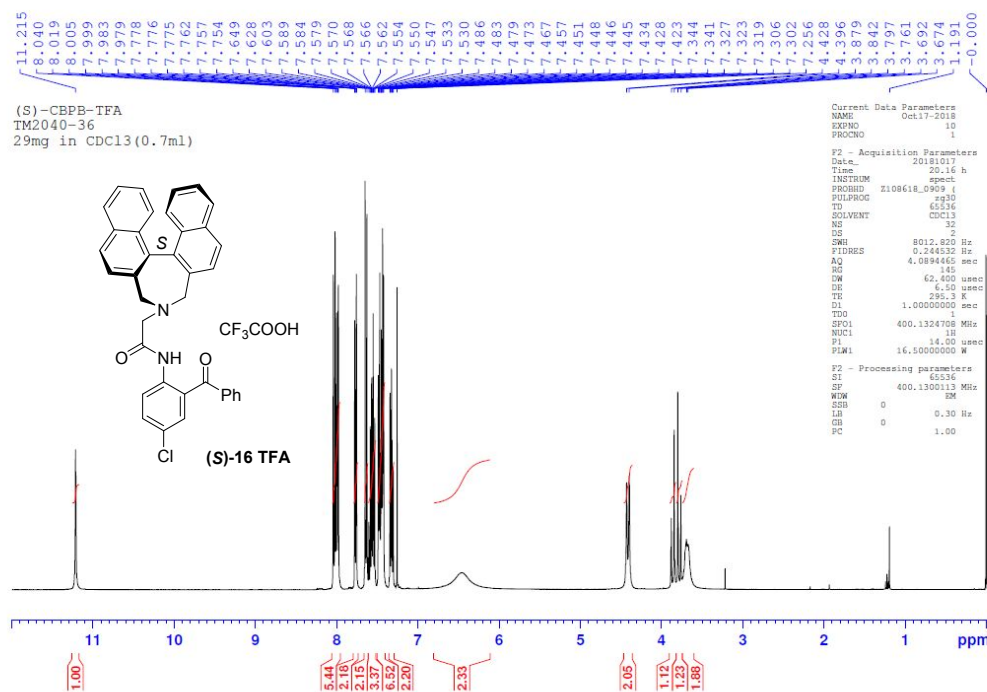


Figure S2. ^{13}C -NMR (100.6 MHz, CDCl_3) of (*S*)-16 TFA

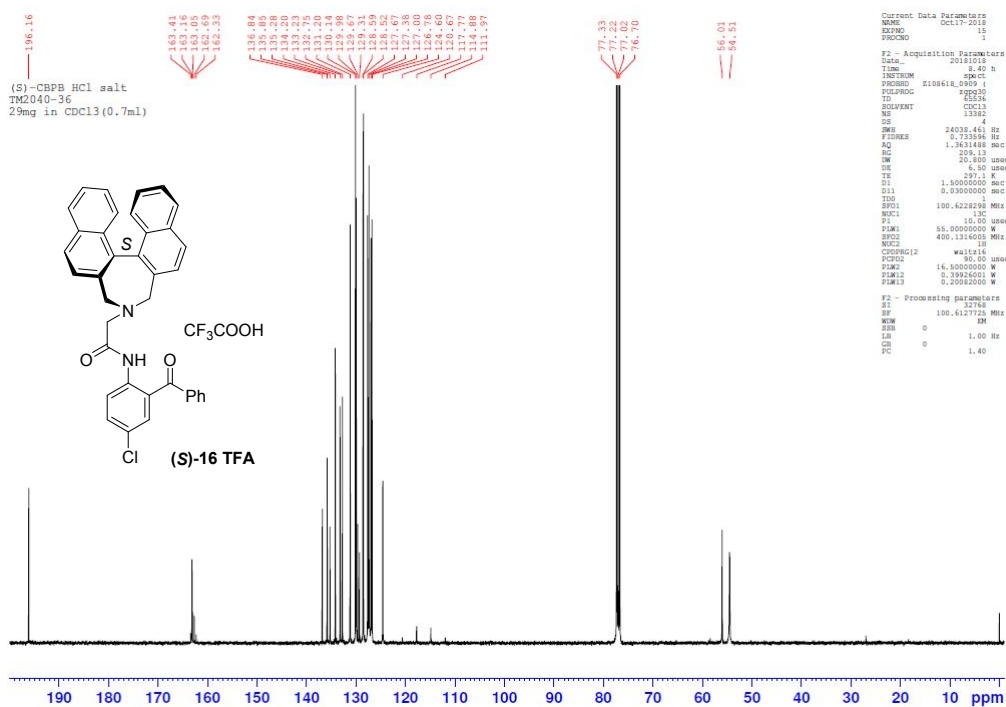


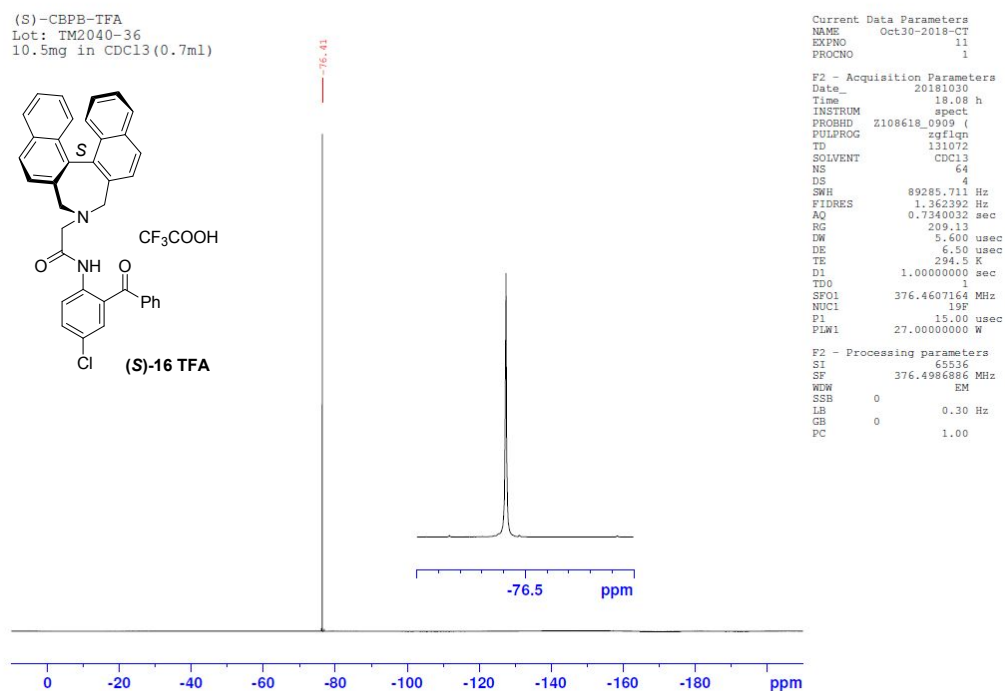
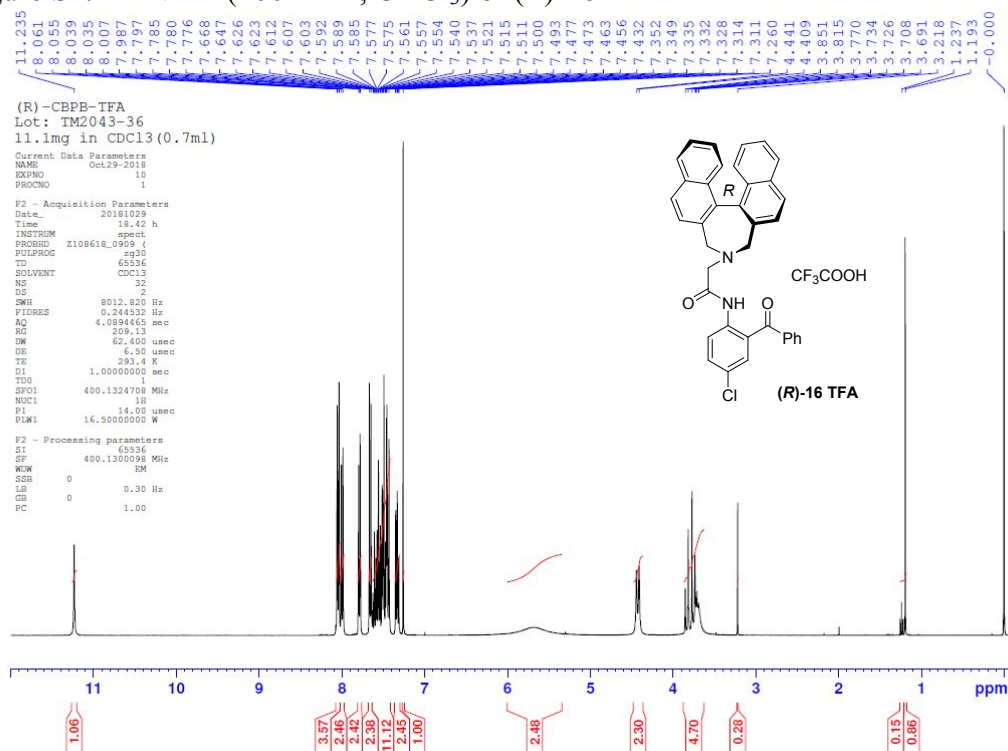
Figure S3. ^{19}F -NMR (376.5 MHz, CDCl_3) of (*S*)-16 TFAFigure S4. ^1H -NMR (400 MHz, CDCl_3) of (*R*)-16 TFA

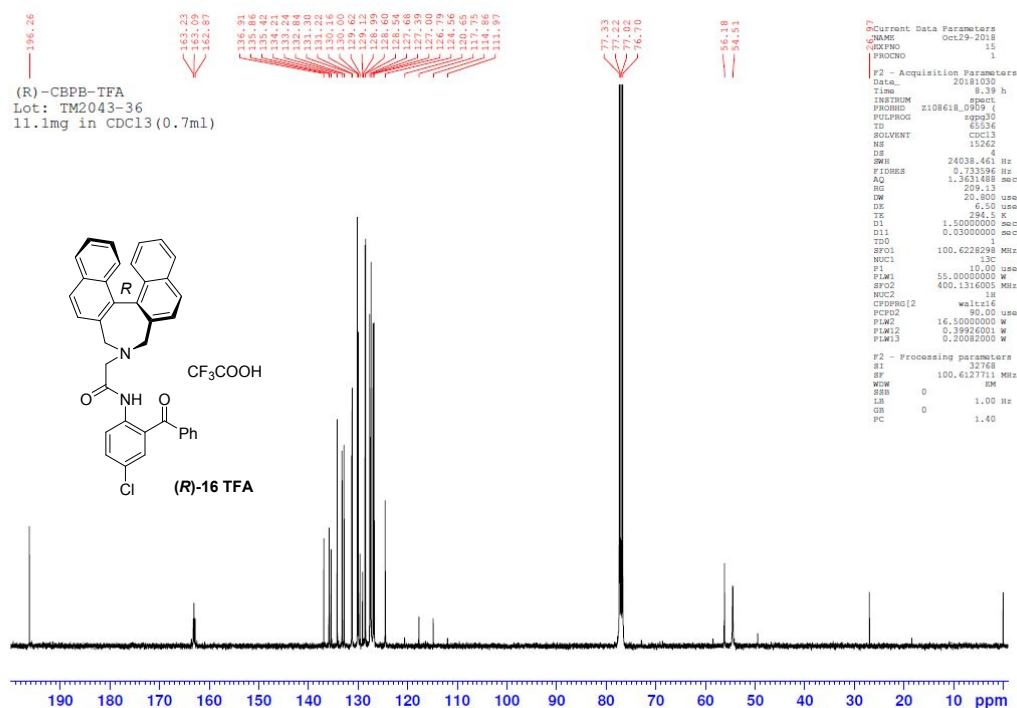
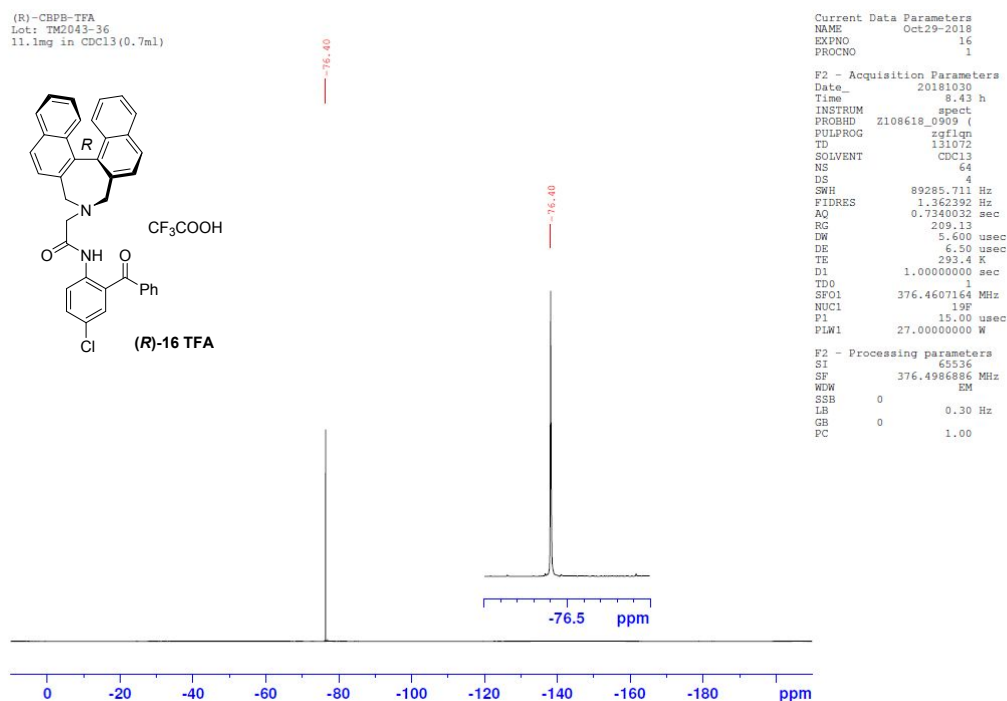
Figure S5. ^{13}C -NMR (100.6 MHz, CDCl_3) of (*R*)-**16** TFAFigure S6. ^{19}F -NMR (376.5 MHz, CDCl_3) of (*R*)-**16** TFA

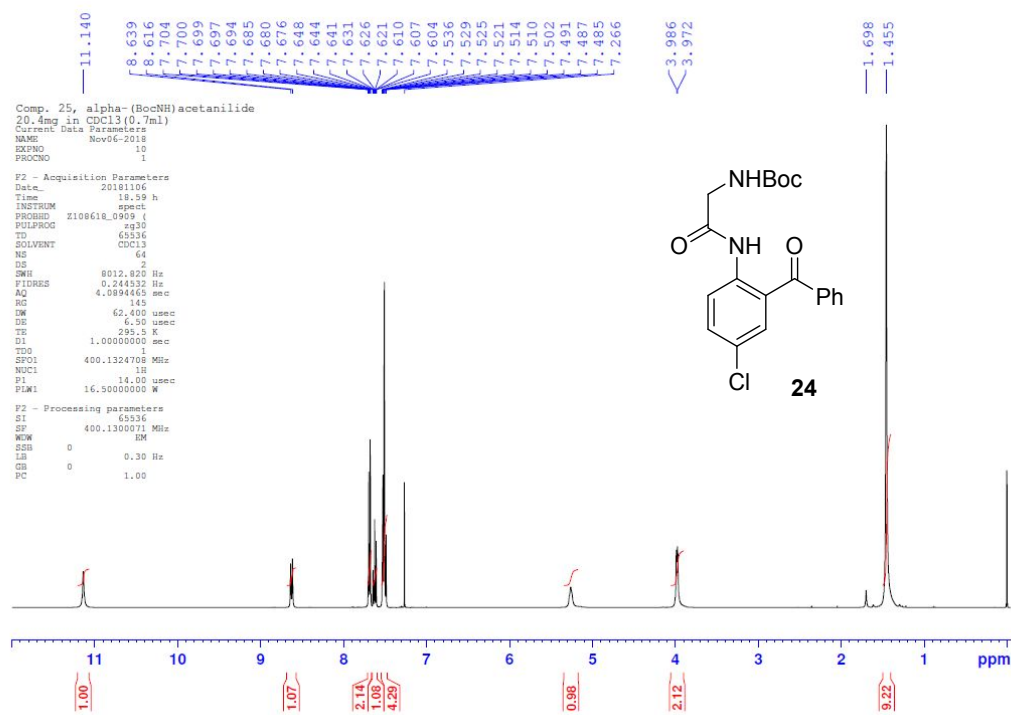
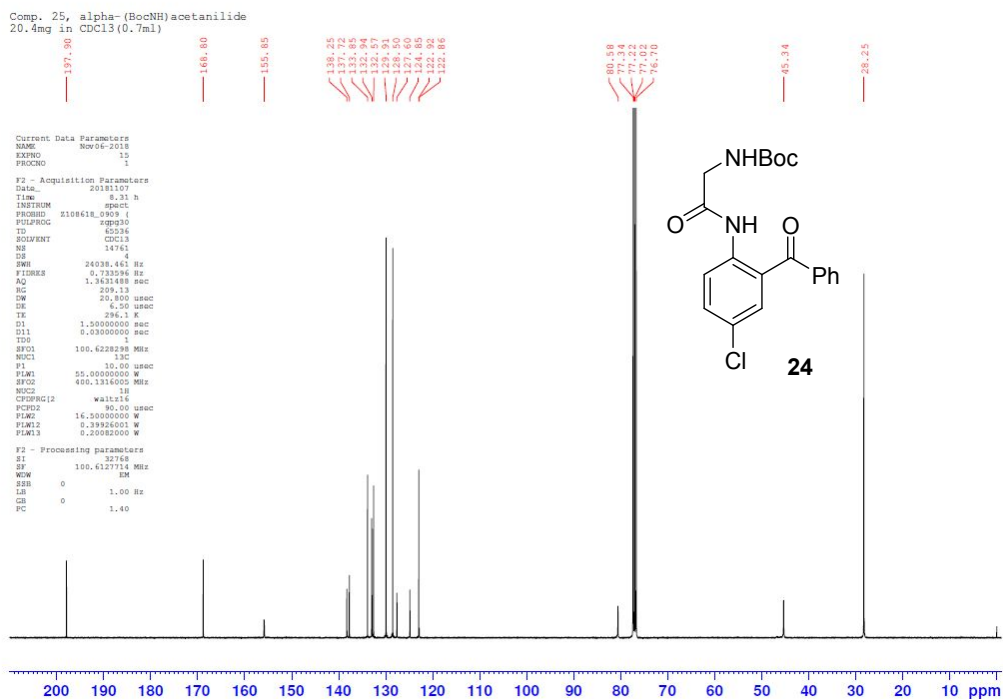
Figure S7. ^1H -NMR (400 MHz, CDCl_3) of **24**Figure S8. ^{13}C -NMR (100.6 MHz, CDCl_3) of **24**

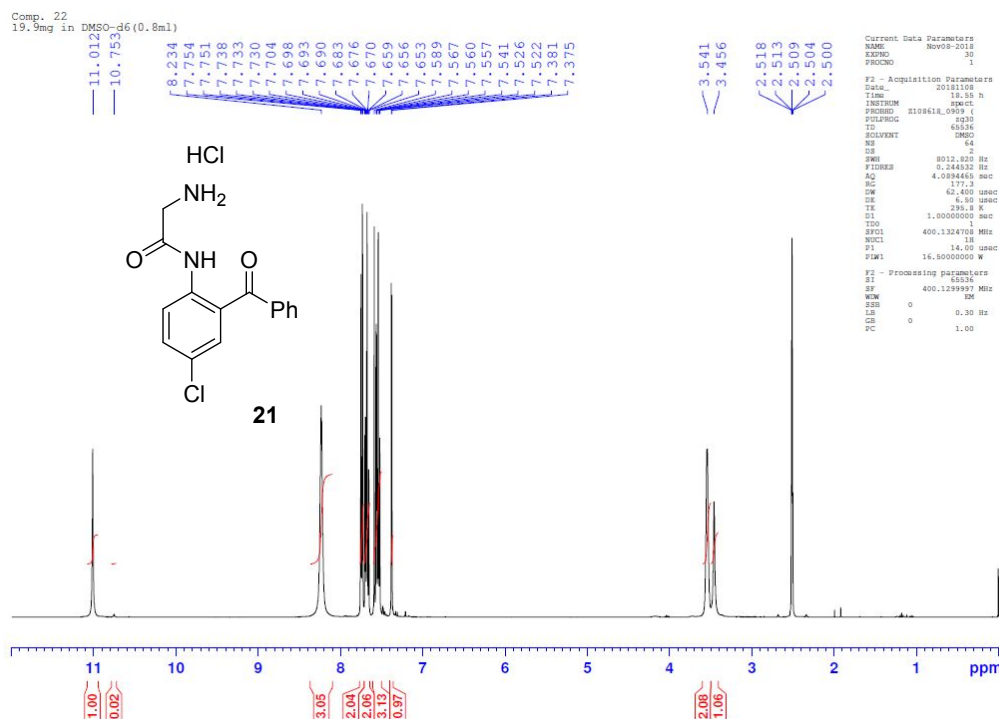
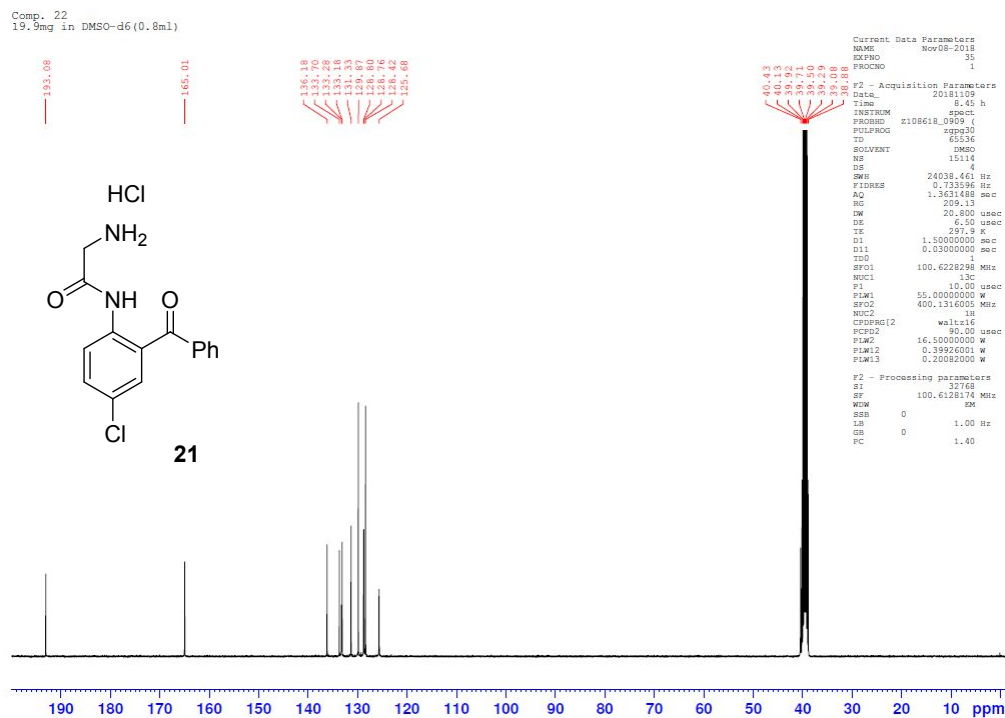
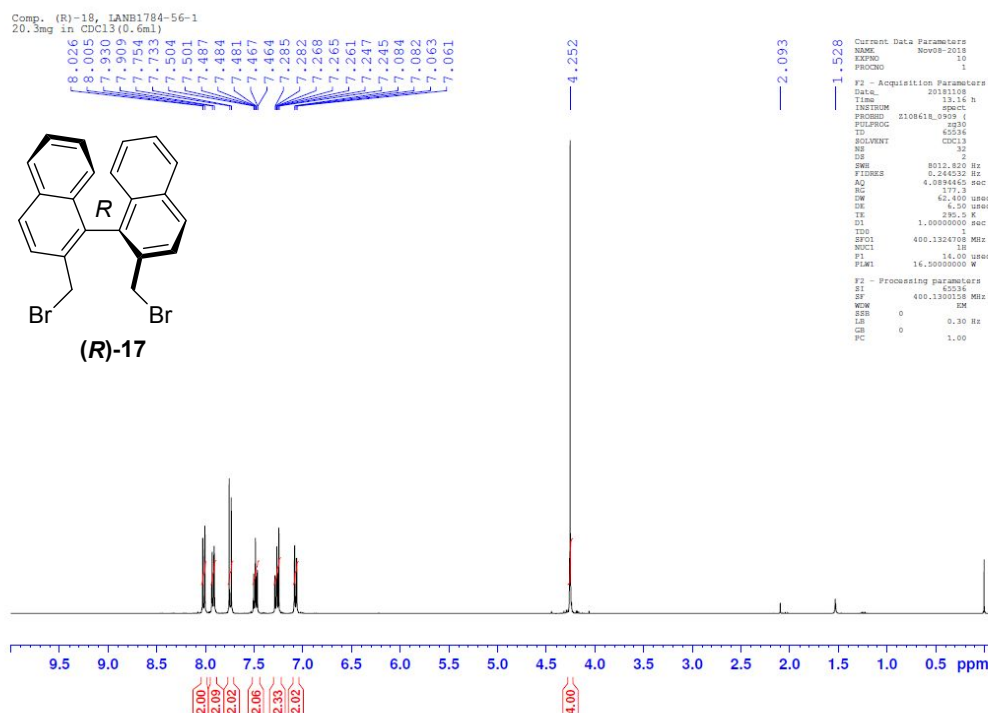
Figure S9. ^1H -NMR (400 MHz, $\text{DMSO}-d_6$) of **21**Figure S10. ^{13}C -NMR (100.6 MHz, $\text{DMSO}-d_6$) of **21**

Figure S11. ^1H -NMR (400 MHz, CDCl_3) of (*R*)-17Figure S12. ^{13}C -NMR (100.6 MHz, CDCl_3) of (*R*)-17