

Supplementary materials

**Enantioselective recognition of lysine and phenylalanine by an
imidazole salt-type fluorescent probe based on H₈-BINOL**

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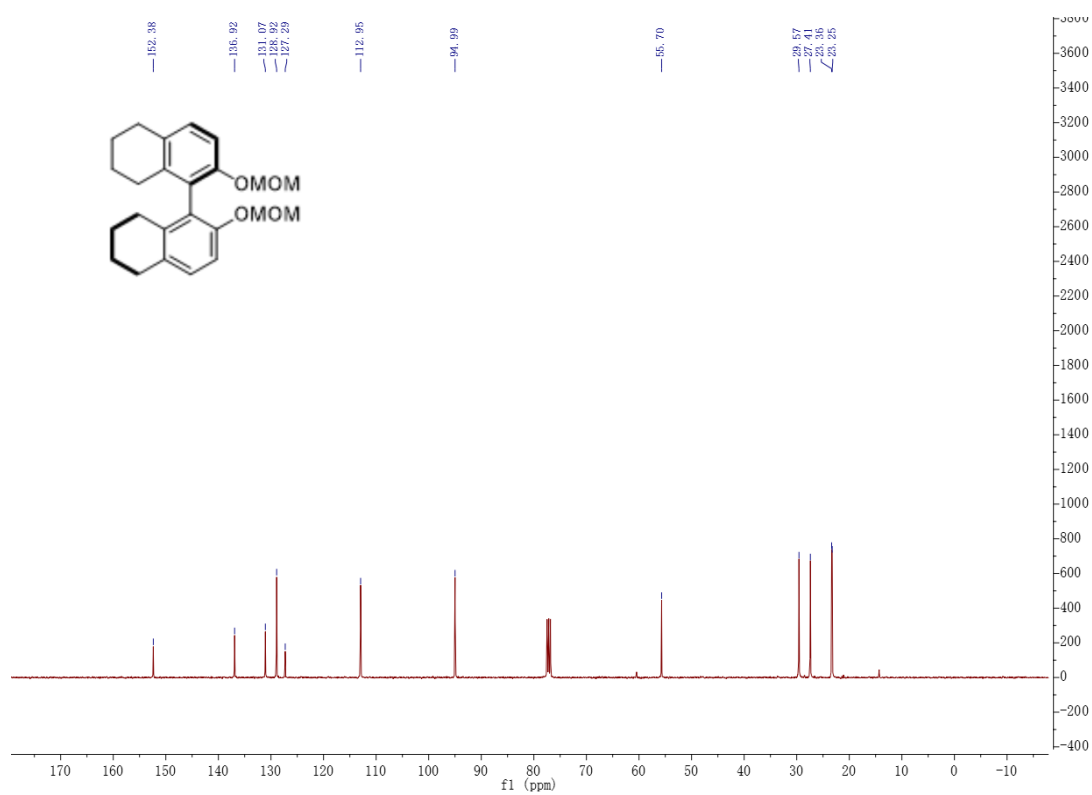
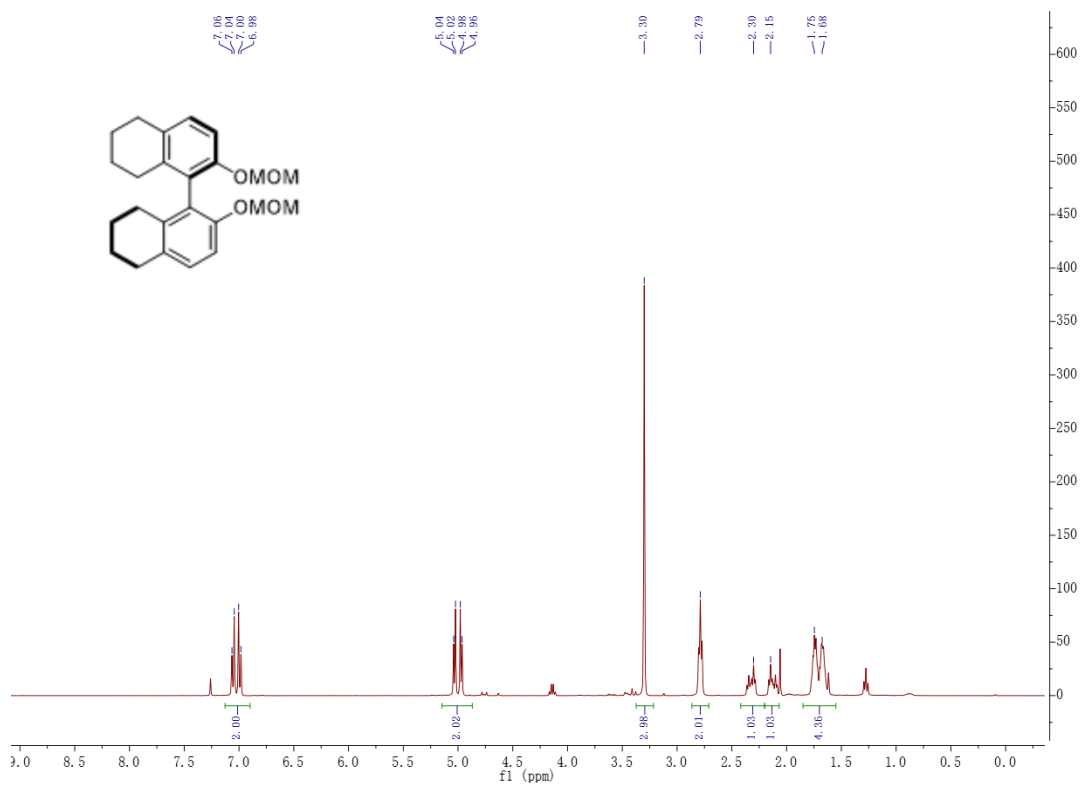
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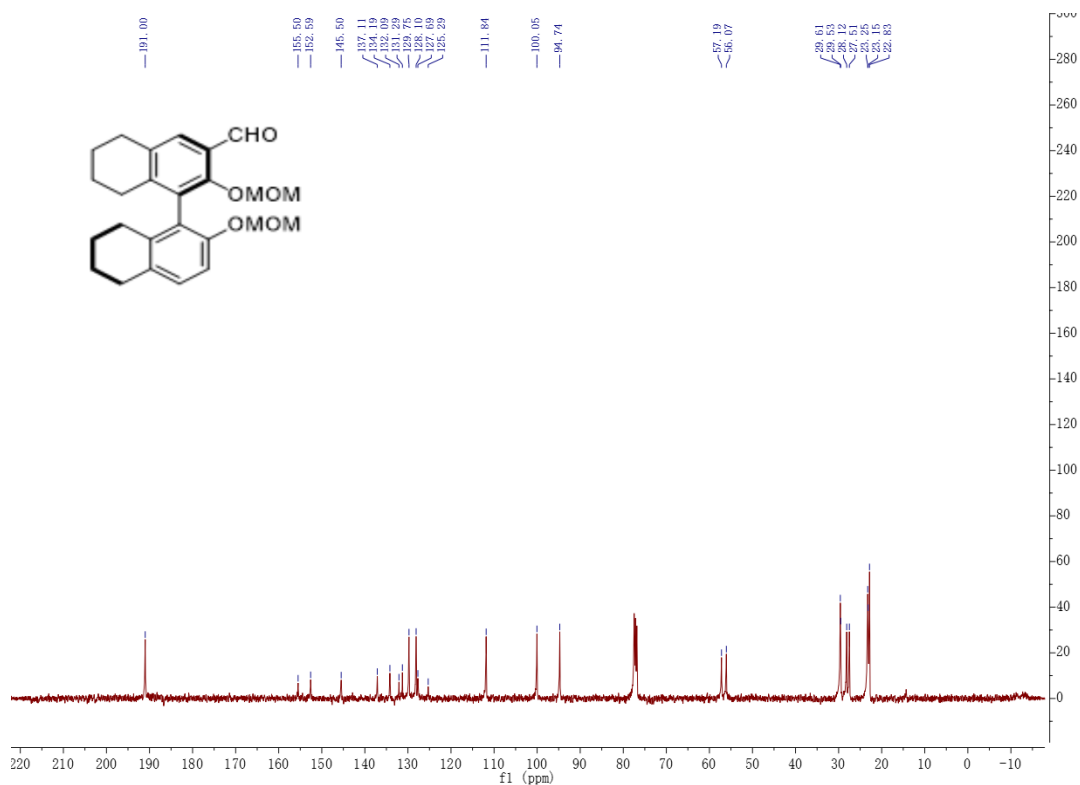
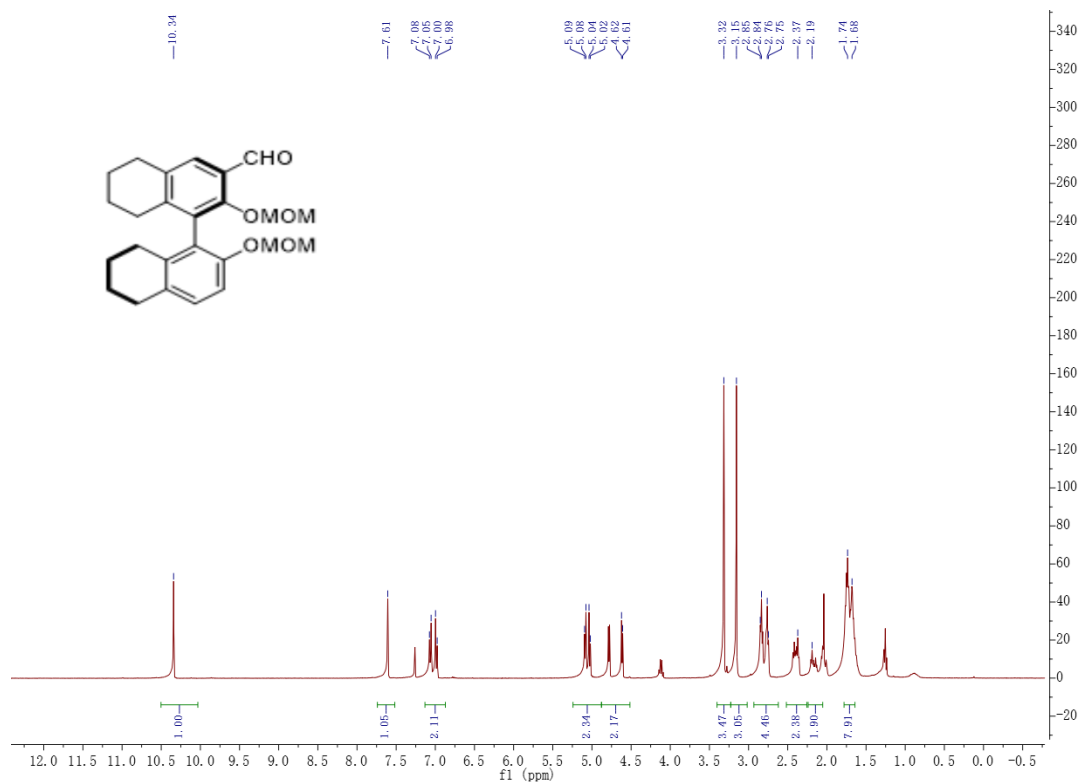
Email: sunxiaoxia77@126.com (X. Sun). huyu@ncu.edu.cn (Y. Hu)

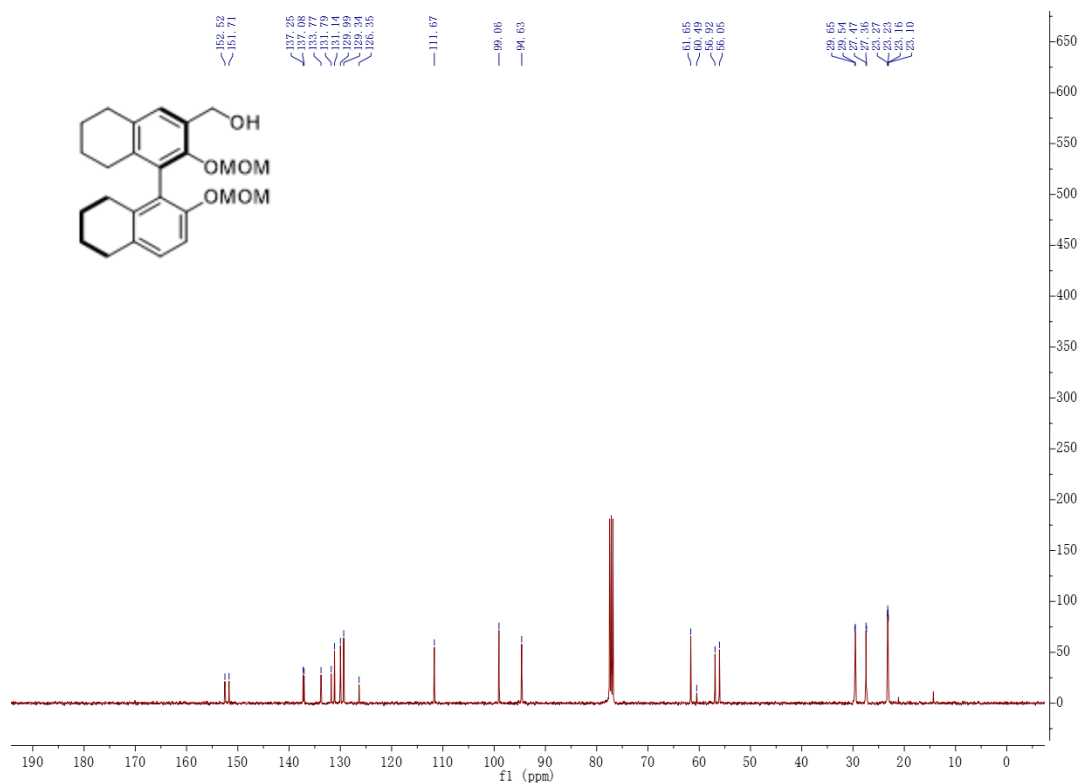
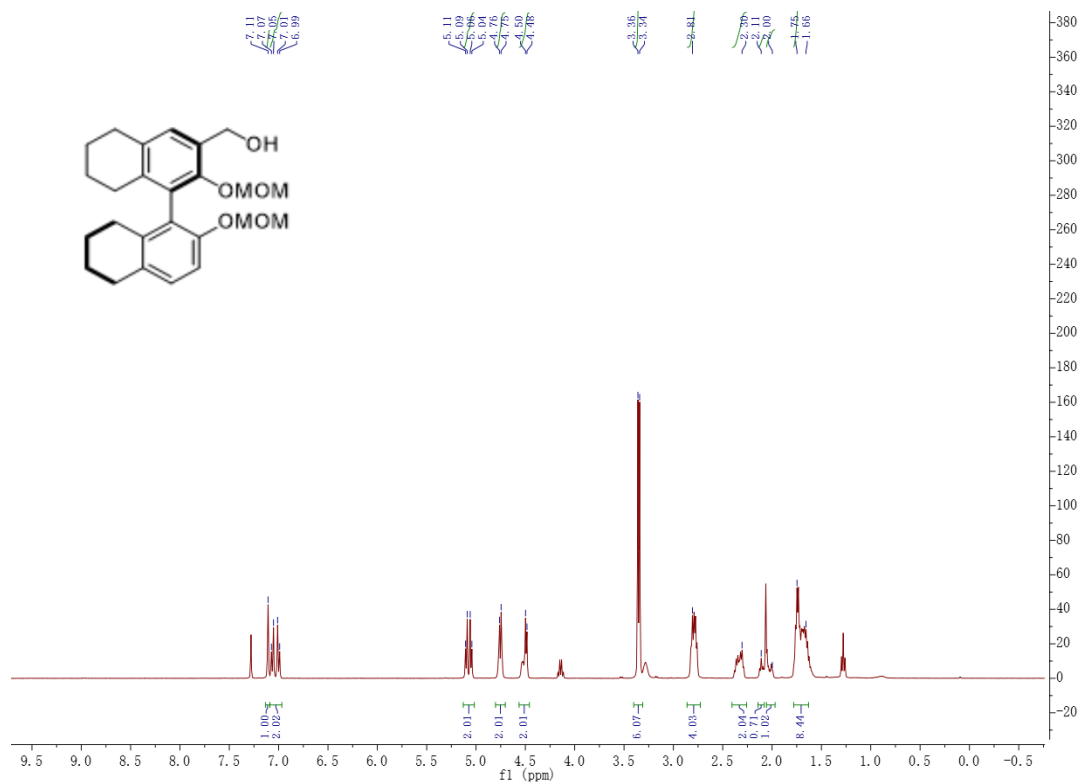
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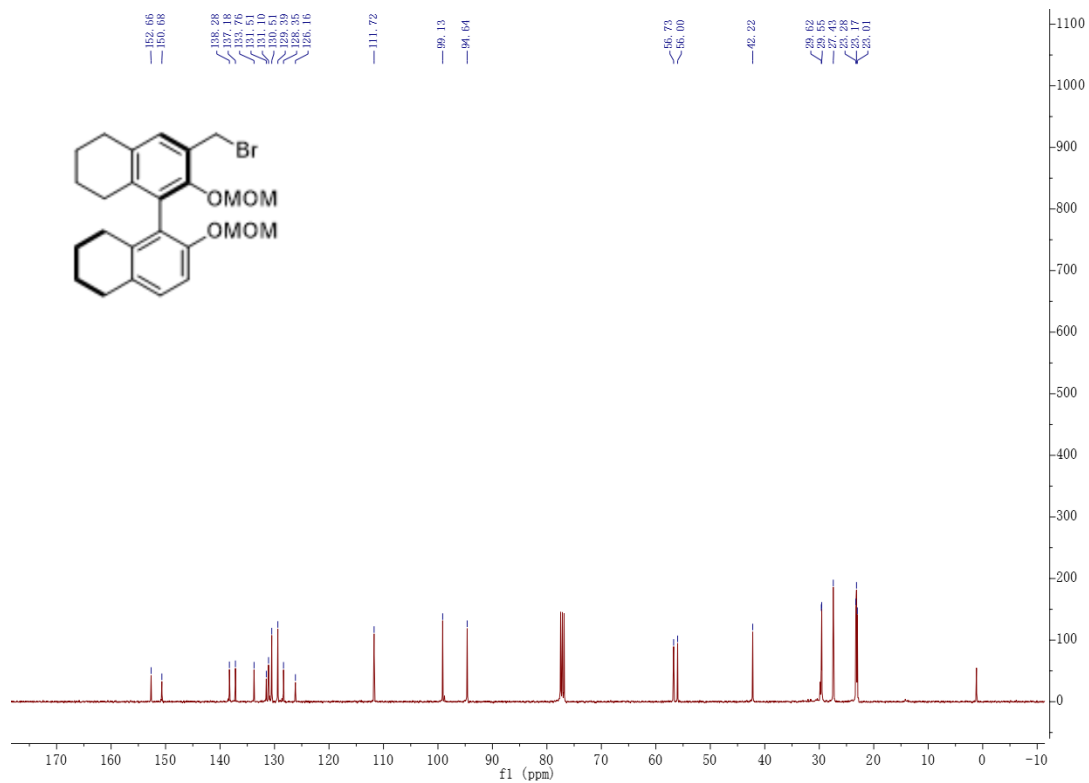
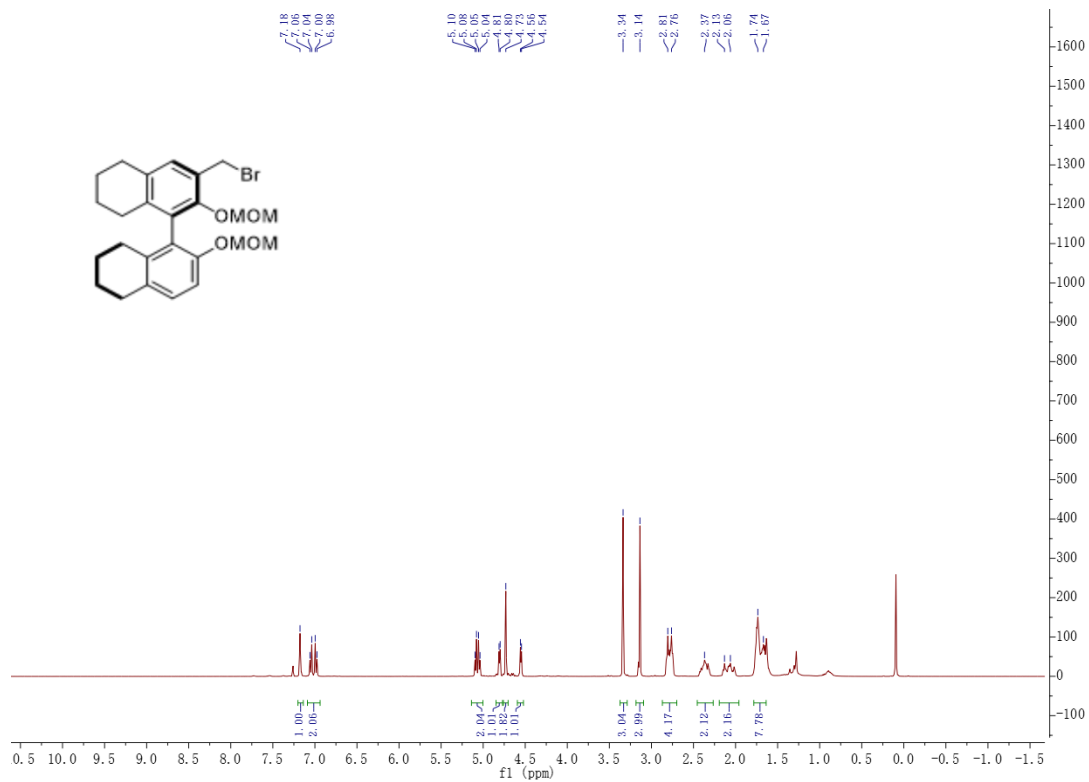
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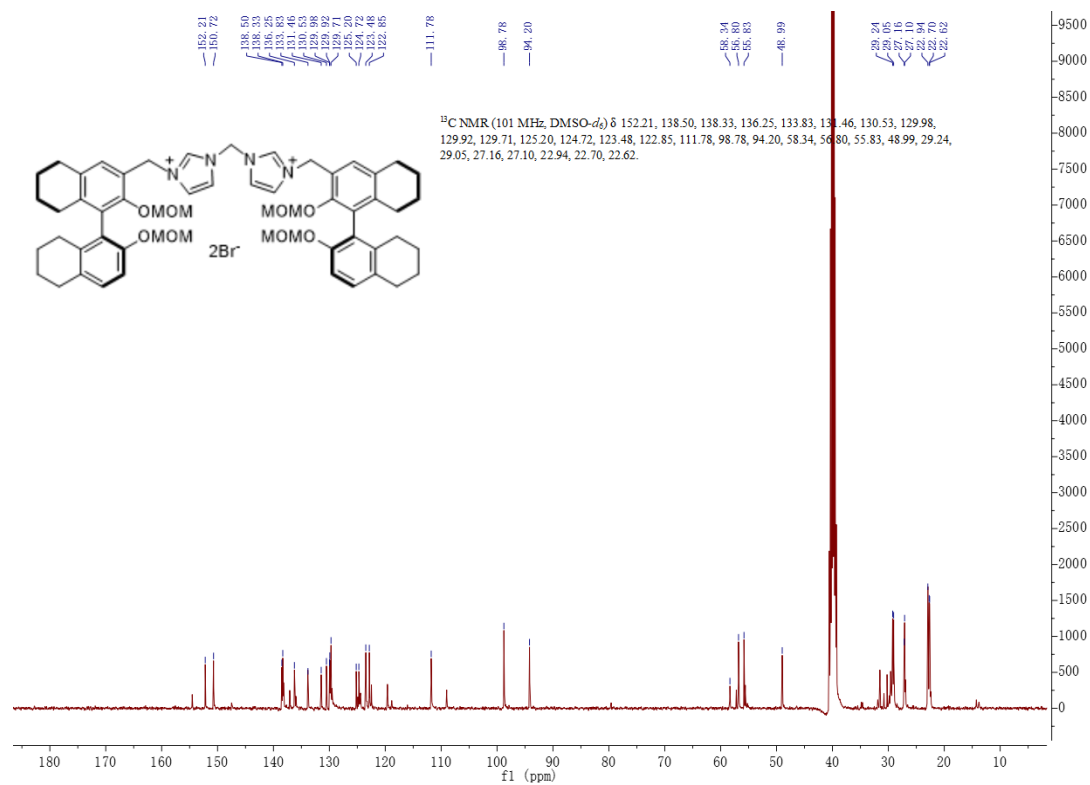
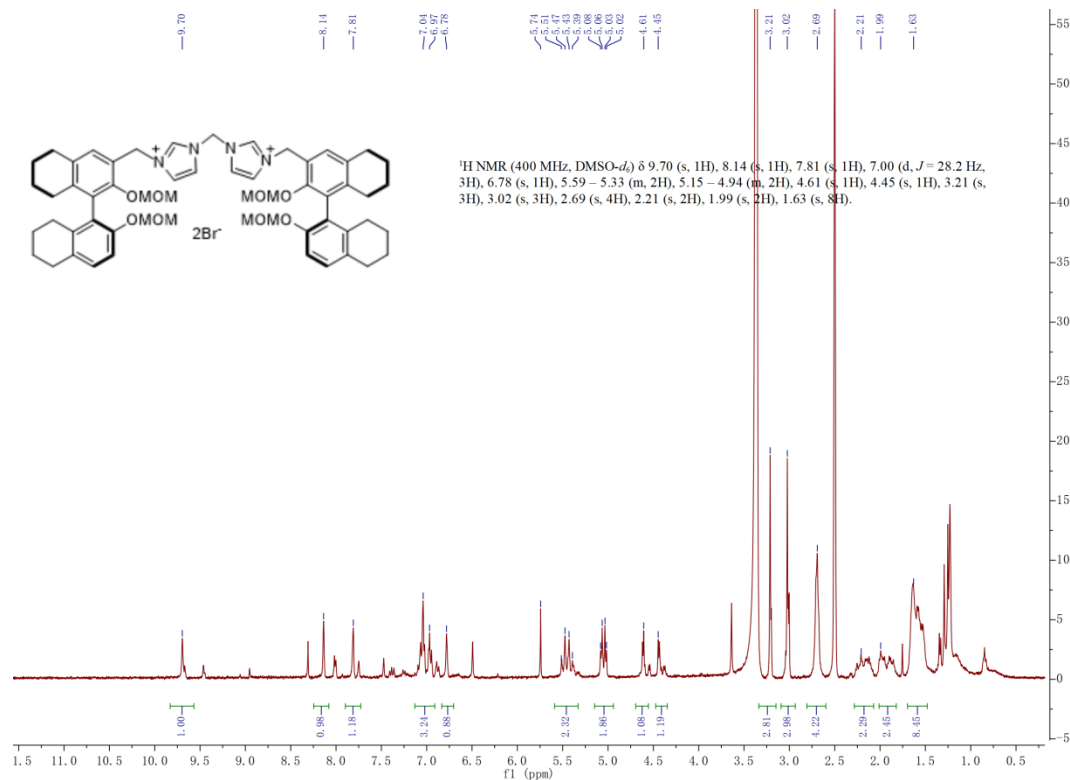
二、 ^1H NMR, ^{13}C NMR and MS-ESI



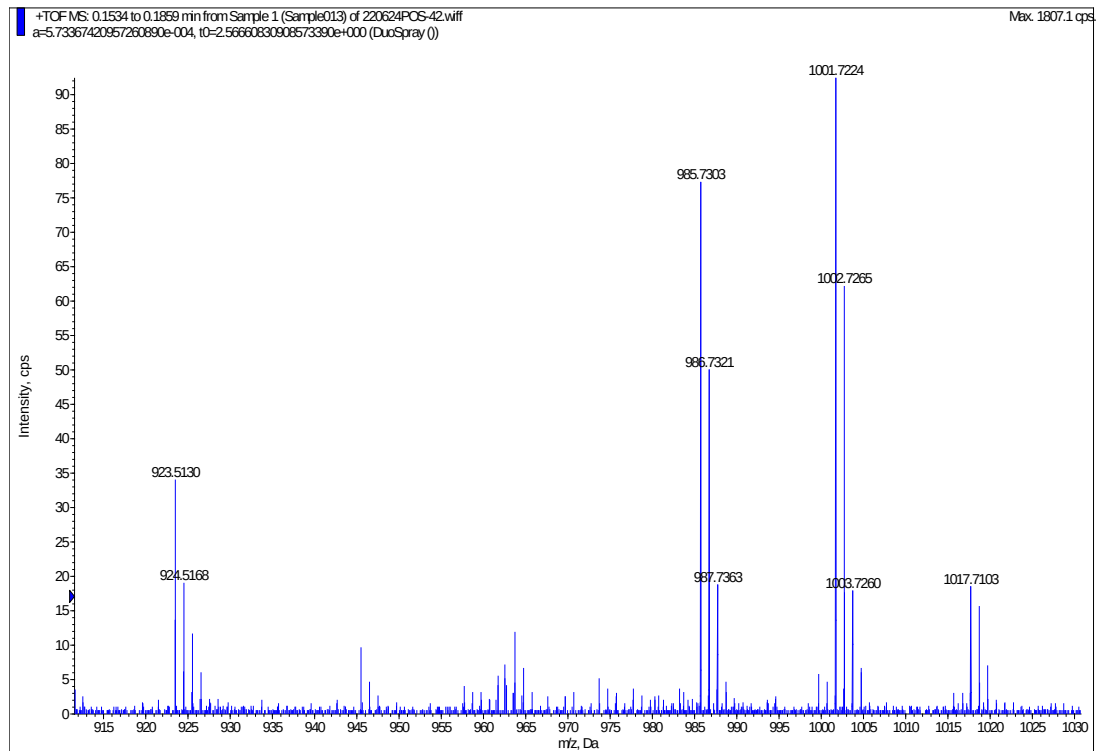




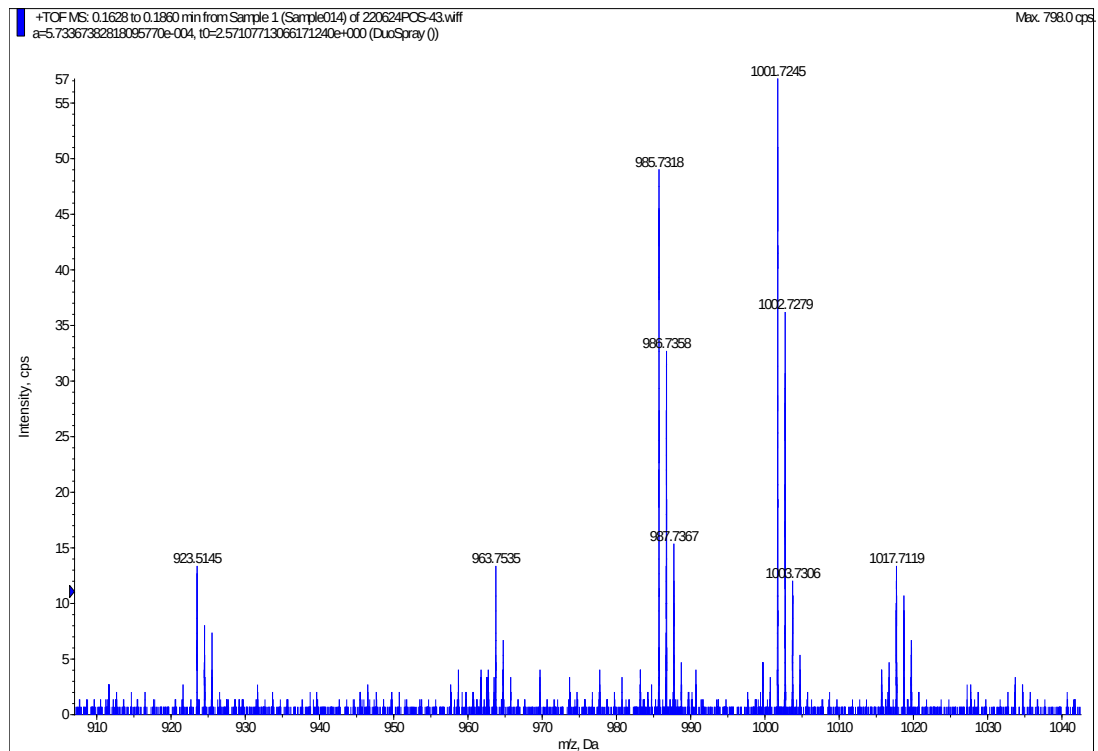




2.1 MS-ESI of (*R*)-1



2.1 MS-ESI of (*S*)-1



三、Figure S1

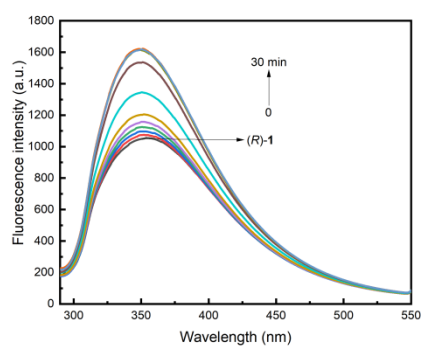


Figure S1 Fluorescence intensity change of (R)-1 in an aqueous solution within 30min

四、Fluorescence experiments of (S)-1 for lysine and phenylalanine

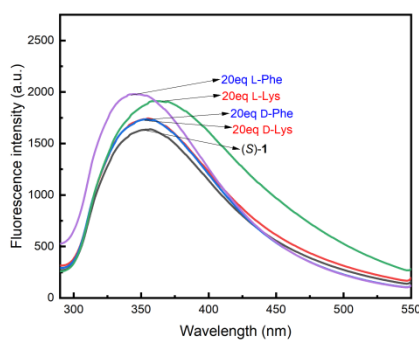
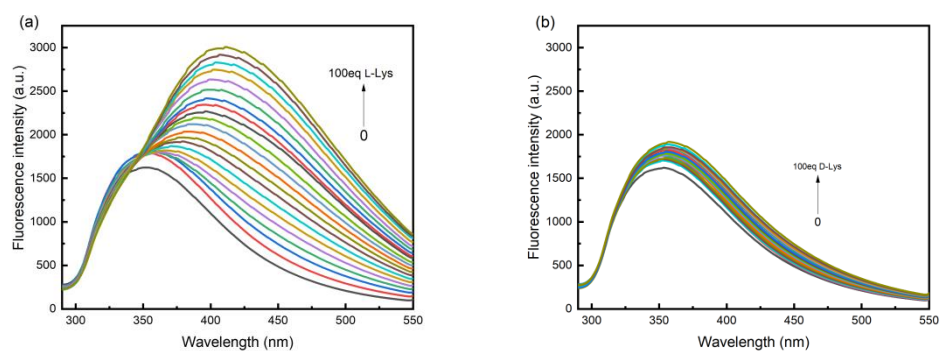


Figure S2 Fluorescence spectra of (S)-1 (2.0×10^{-5} M) with L/D-Lys and L/D-Phe (20.0 equivalents) in aqueous solution. ($\lambda_{exc}=280$ nm, slits: 5.0/2.5 nm).



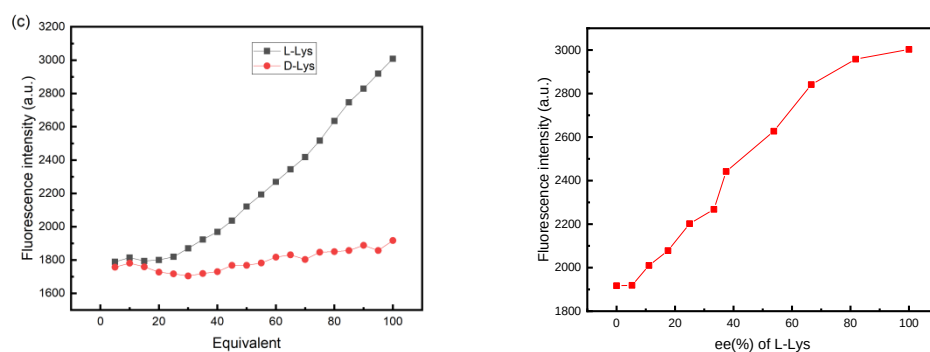


Figure S3 (a) Fluorescence titration spectra of (S)-1 (2.0×10^{-5} M) with L-Lys (0.1M) in aqueous solution. (b) Fluorescence titration spectra of (S)-1 with D-Lys in aqueous solution. (c) Trends of (S)-1 fluorescence intensity after the addition of different equivalent Lys. (d) Fluorescence response at $\lambda = 349$ nm for the mixture of (S)-1 toward L-Lys (100.0 eq) at various ee ($\lambda_{exc}=280$ nm, slits: 5.0/2.5 nm).

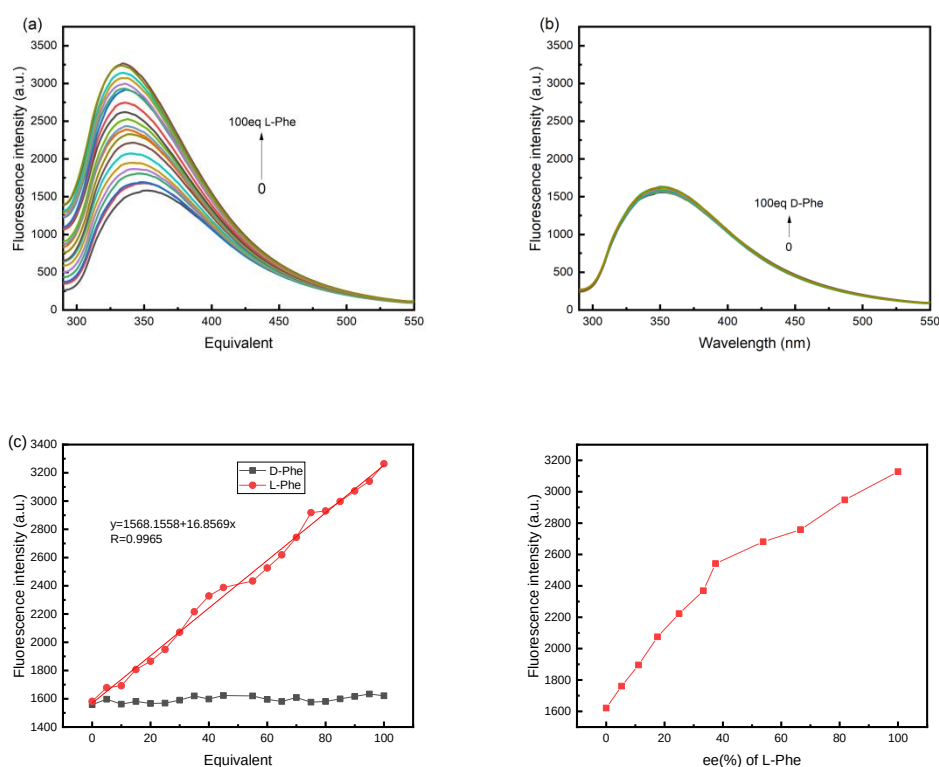


Figure S4 (a) Fluorescence titration spectra of (S)-1 (2.0×10^{-5} M) with L-Phe (0.1M) in aqueous solution. (b) Fluorescence titration spectra of (S)-1 with D-Phe in aqueous solution. (c) Trends of (S)-1 fluorescence intensity after the addition of different equivalent Phe. (d) Fluorescence response at $\lambda = 349$ nm for the mixtures of (S)-1 toward L-Phe (100.0 eq) at various ee. ($\lambda_{exc}=280$ nm, slits: 5.0/2.5 nm)