<Electronic Supplementary Information>

Pair of chiral 2D silver(I) enantiomers: chiral recognition of *l*- and *d*-histidine via differential pulse voltammetry

Dongwon Kim,[a] Kyeong-Deok Seo,[a] Yoon-Bo Shim,[a] Kyungsuh Lee,[a] Sang Hak Lee,[a] Young-A Lee,*[,b] and Ok-Sang Jung*[,a]

[a]Department of Chemistry, Pusan National University, Busan 46241, Republic of Korea Fax: (+82) 51-5163522; Tel: (+82) 51-5103240; E-mail: oksjung@pusan.ac.kr

[b]Department of Chemistry, Jeonbuk National University, Jeonju 54896, Korea.

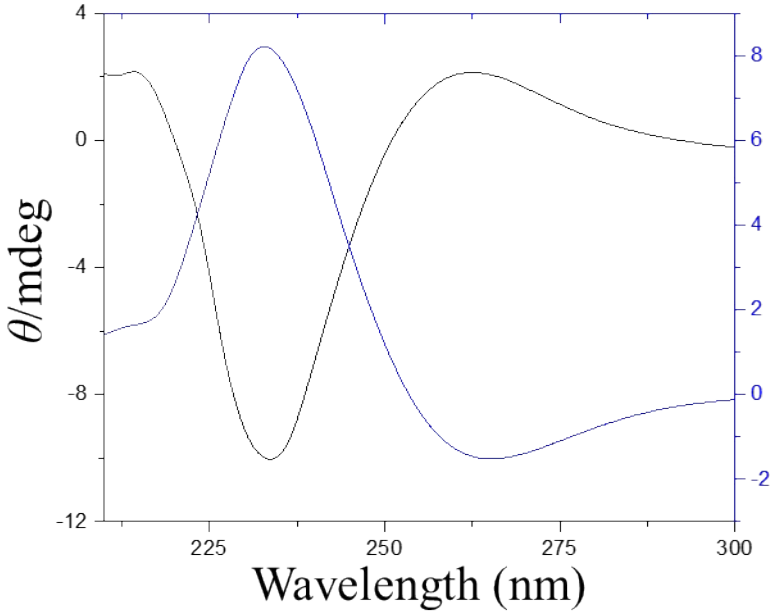

Fig. S1. Circular dichroism (CD) spectra of *r*,*s*-L (blue line) and *s*,*r*-L (black line).

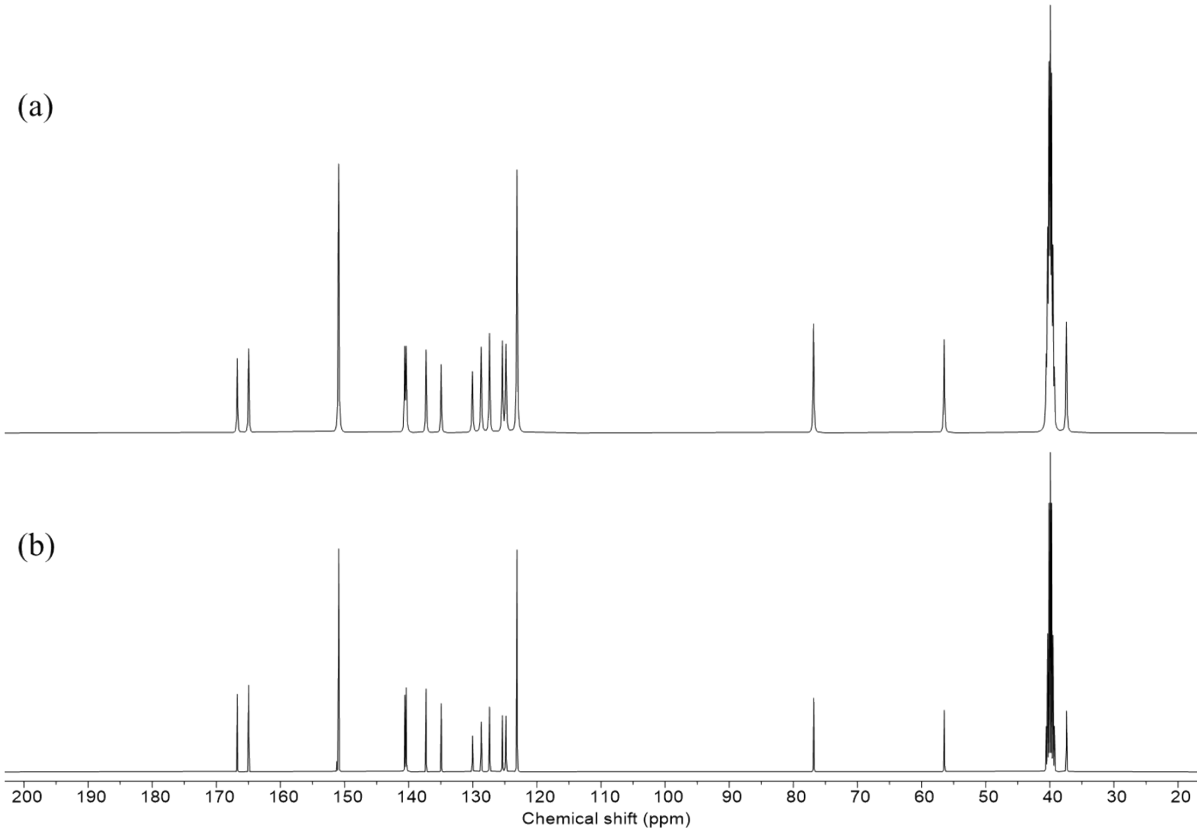

Fig. S2 ^{13}C NMR spectra for *s,r*-L (a), and *r,s*-L (b) in Me_2SO-d_6.

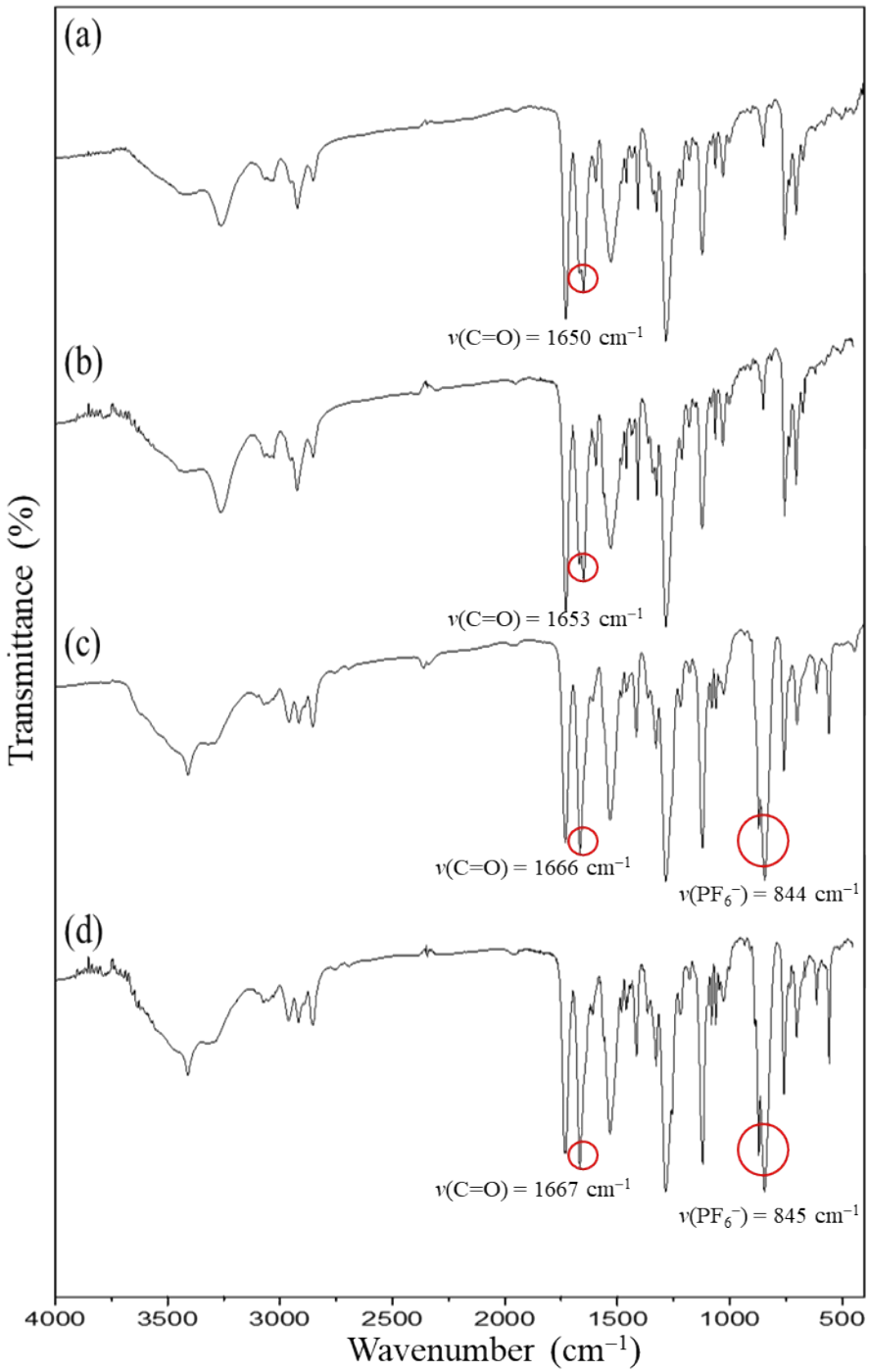

Fig. S3 IR spectra for *s,r*-L (a), *r,s*-L (b), [Ag(*s,r*-L)](PF_6)·$3C_4H_8O_2$·$0.5H_2O$ (c), and [Ag(*r,s*-L)](PF_6)·$3C_4H_8O_2$·$0.5H_2O$ (d).

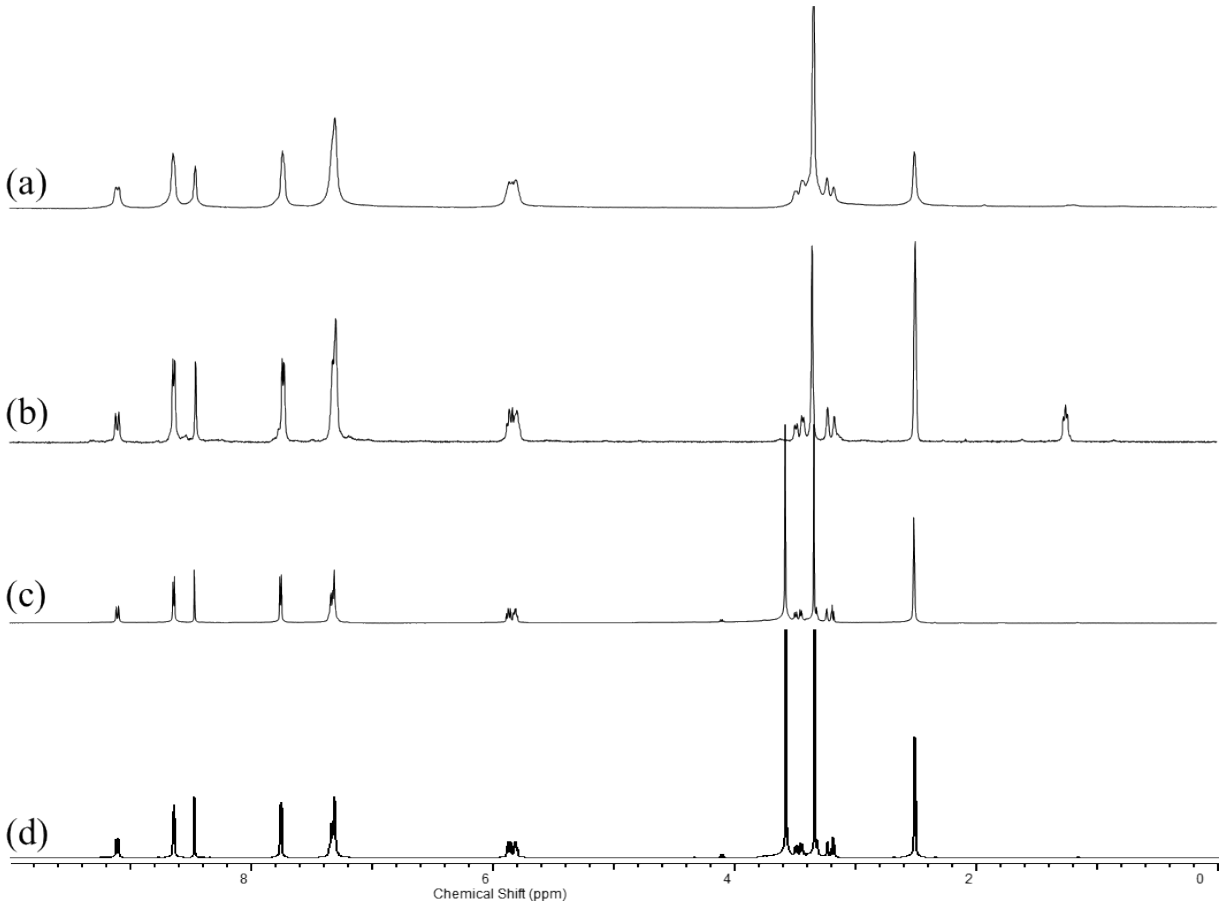

Fig. S4 ^{1}H NMR spectra for *s,r*-L (a), *r,s*-L (b), [Ag(*r,s*-L)](PF_6)·3$C_4H_8O_2$·0.5H_2O (c, *dissociated*), and [Ag(*r,s*-L)](PF_6)·3$C_4H_8O_2$·0.5H_2O (d, *dissociated*) in Me_2SO-d_6.

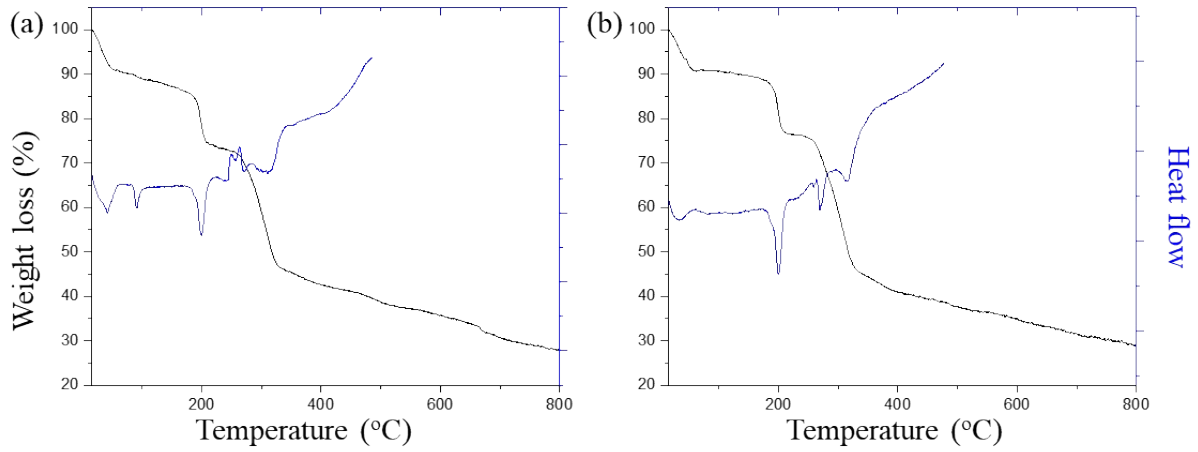

Fig. S5 TG and DSC curves for [Ag(*s,r*-L)](PF_6)·3$C_4H_8O_2$·0.5H_2O (a), and [Ag(*r,s*-L)](PF_6)·3$C_4H_8O_2$·0.5H_2O (b).

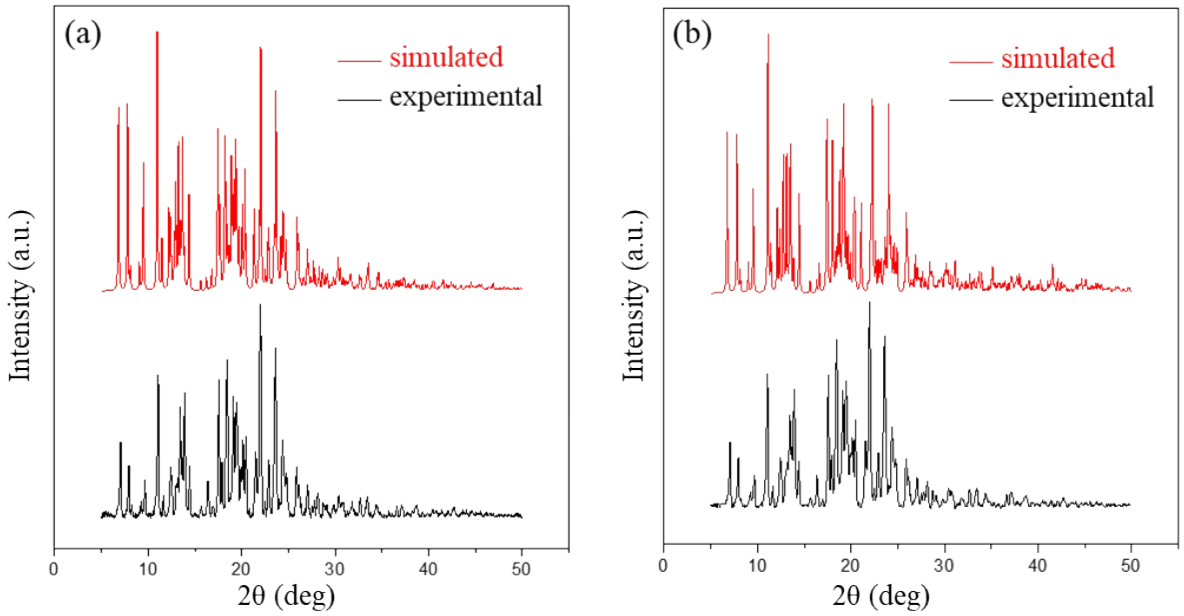

Fig. S6 PXRD patterns for [Ag(*s,r*-L)](PF_6)·3$C_4H_8O_2$·0.5H_2O (a), and [Ag(*r,s*-L)](PF_6)·3$C_4H_8O_2$·0.5H_2O (b).

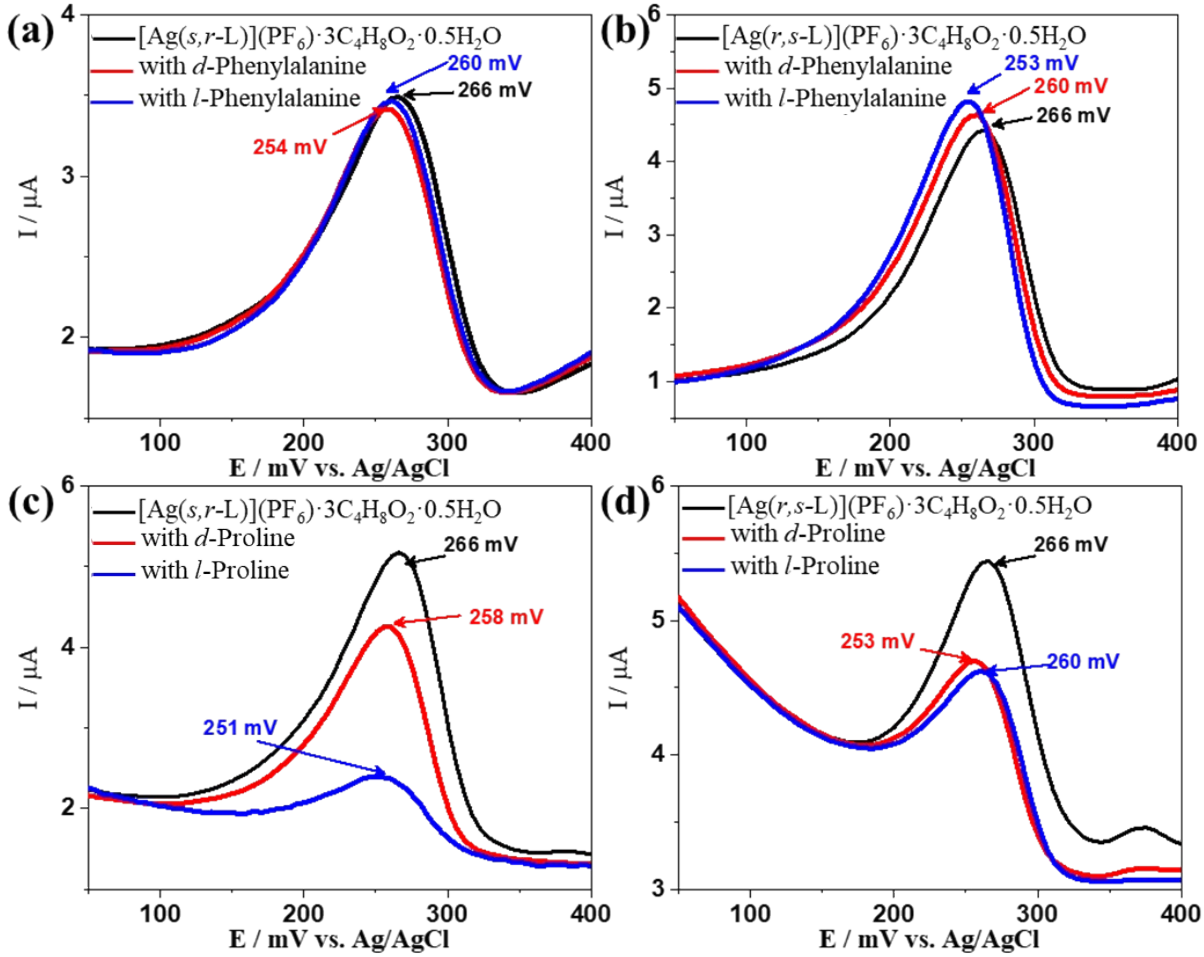

Fig. S7 DPVs recorded for [Ag(*s*,*r*-L)](PF_6)·$3C_4H_8O_2$·$0.5H_2O$ in the presence of 1.0 mM *l*- and *d*- forms of phenylalanine (a), proline (c), and [Ag(*r*,*s*-L)](PF_6)·$3C_4H_8O_2$·$0.5H_2O$ for *l*- and *d*- forms of phenylalanine (b), and proline (d).

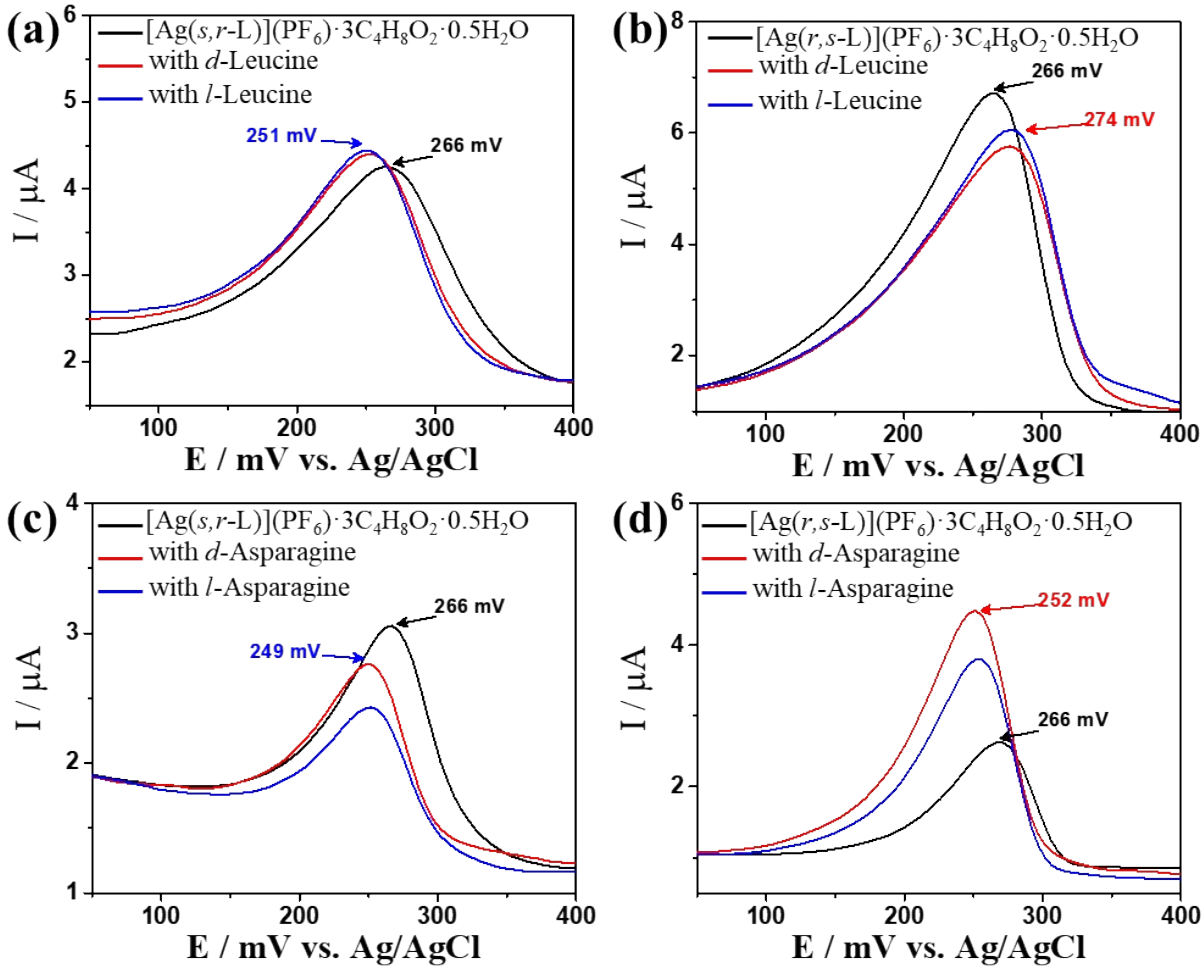

Fig. S8 DPVs recorded for [Ag(*s*,*r*-L)](PF_6)·$3C_4H_8O_2$·$0.5H_2O$ in the presence of 1.0 mM *l*- and *d*- forms of leucine (a), asparagine (c), and [Ag(*r*,*s*-L)](PF_6)·$3C_4H_8O_2$·$0.5H_2O$ for *l*- and *d*- forms of leucine (b), and asparagine (d).