

Supporting information

A novel chiral ligand exchange capillary electrophoresis system with amino acid ionic liquid as ligand and its application in screening D-amino-acid oxidase inhibitors

**Xiaoyu Mu^{a,b}, Li Qi^{*a}, Ying Shen^{a,b}, Haizhi Zhang^{a,b}, Juan Qiao^a,
and Huimin Ma^a**

^a Beijing National Laboratory for Molecular Sciences; Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100190, China.

^b University of Chinese Academy of Sciences, Beijing, 100049, China.

* Correspondence: Li Qi

Associate Prof. Dr.
Zhongguancun Beiyijie 2#
Beijing 100190, China
E-mail: qili@iccas.ac.cn
Tel: +86-10-82627290
Fax: +86-10-62559373

The reproducibility (n=5) of the proposed method during condition optimization was investigated in detail, and the results were shown as following:

Table S1

pH	Rs¹	RSD1 (%)	Rs²	RSD2 (%)	Rs³	RSD3 (%)
7.80	1.04	3.51	1.24	2.00	0.66	4.04
8.00	1.77	3.61	2.3	2.65	2.15	2.65
8.20	2.4	3.61	2.93	2.08	2.93	4.00
8.40	2.95	2.08	3.2	3.51	3.54	3.21
8.60	3.17	2.52	3.33	5.03	3.74	3.79
8.80	3.47	3.06	3.62	4.51	4.72	3.61

RSD1, RSD2 and RSD3 are the relative standard deviations (RSDs) of Rs¹, Rs² and Rs³.

Table S2

Ratio	Rs¹	RSD1 (%)	Rs²	RSD2 (%)	Rs³	RSD3 (%)
1:1	1.74	2.08	0.85	4.04	1.02	4.04
1:2	2.12	3.21	1.49	1.53	1.82	1.00
1:3	2.23	1.53	2.14	3.21	2.54	2.52
1:4	2.62	2.00	2.78	1.00	3.07	2.52
1:5	2.95	1.73	3.20	2.08	3.54	1.53
1:6	2.92	2.31	3.14	2.52	3.34	2.08
1:7	2.95	3.51	3.14	3.60	3.44	2.00

RSD1, RSD2 and RSD3 are same as Table S1.

Table S3

Complex concentration (mM)	Rs¹	RSD1 (%)	Rs²	RSD2 (%)	Rs³	RSD3 (%)
10	2.81	2.64	2.90	2.08	3.32	4.00
15	2.95	3.05	3.20	2.64	3.54	3.00
20	2.52	1.53	2.93	3.61	2.97	1.53
25	2.54	3.51	2.91	3.51	2.92	4.96
30	2.48	4.68	2.85	5.29	2.89	3.51

RSD1, RSD2 and RSD3 are same as Table S1.