Electronic Supplementary Information

Separation and detection of free D- and L-amino acids in tea by offline two-dimensional liquid chromatography

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Time	Mobile phase A (%) (TFA)	Mobile phase B (%) (ACN)	Flow rate (mL/min)
0	68	32	1
18	38	62	1
22	38	62	1
28	0	100	1
35	68	32	1
40	68	32	1

Table S1. Mobile phase conditions in investigating the effect of column length and TFA

Time	Mobile phase A	Mobile phase B	Mobile phase C	Elow roto (mI (min)
	$(ACN:H_2O = 9:1)$	(Inorganic salt:THF:ACN = 86:4:10)	ACN	Flow rate (IIIL/IIIII)
0	8	92	0	1
14	11	89	0	1
30	23	77	0	1
36	36	64	0	1
40	40	60	0	1
40.01	0	0	100	1
60	0	0	100	1
60.01	8	92	0	1
65	8	92	0	1

Table S2. Mobile phase conditions in investigating the effect of inorganic salt

Time	Mobilephase A	Mobilephase B	Flow rate (mI (min)
	(0.05 % TFA, 10 mM sodium acetate)	(ACN:H2O=8:2)	Flow rate (IIIL/IIIII)
0	70	30	1
20	62	38	1
23	50	50	1
28	40	60	1
33	0	100	1
53	0	100	1
54	70	30	1
60	70	30	1

Table S3. Mobile phase conditions in investigating the effect of pH in sodium acetate