

Electronic Supplementary Information

Sweeping-micelle to solvent stacking for on-line preconcentration and determination of organic acids in *Angelica sinensis* by capillary electrophoresis

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Supplement of Figure

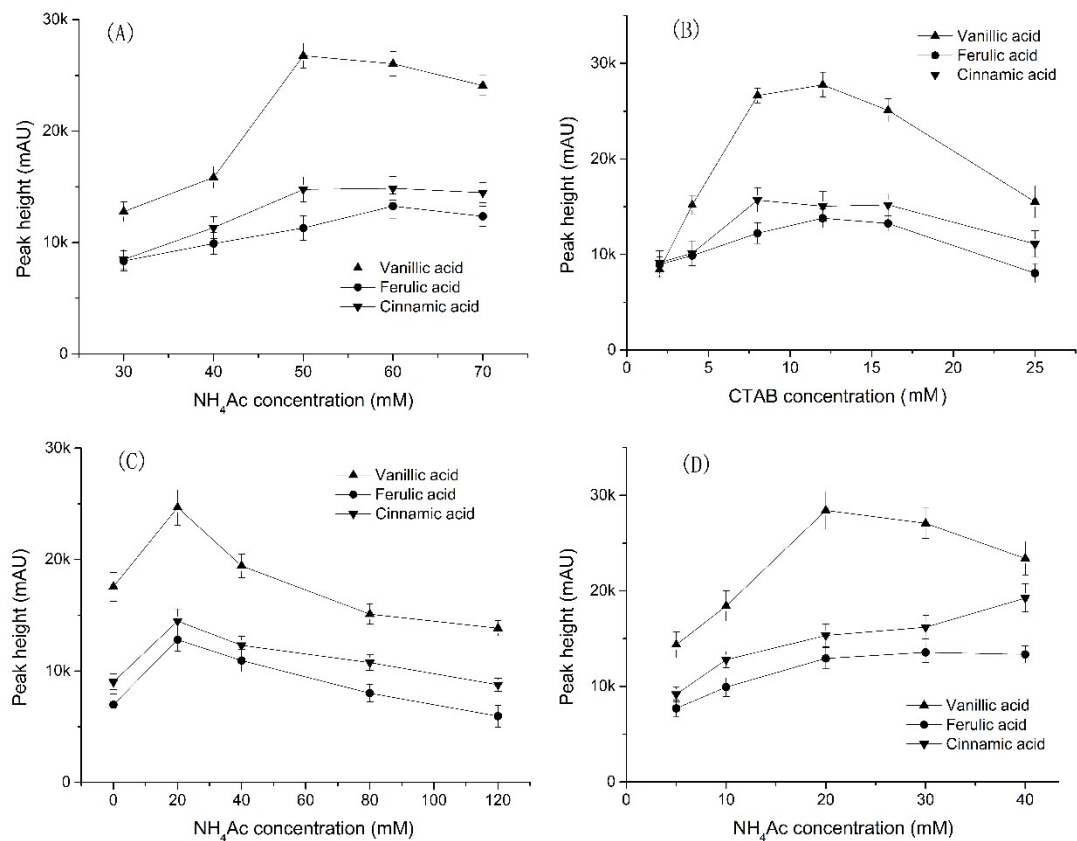


Fig. S1. Effect of NH_4Ac concentration in BGS(A); effect of CTAB (B) and NH_4Ac (C) concentration in micellar solution; effect of NH_4Ac concentration in sample matrix. $5 \mu\text{g mL}^{-1}$ each of organic acid. Other conditions are the optimum conditions.

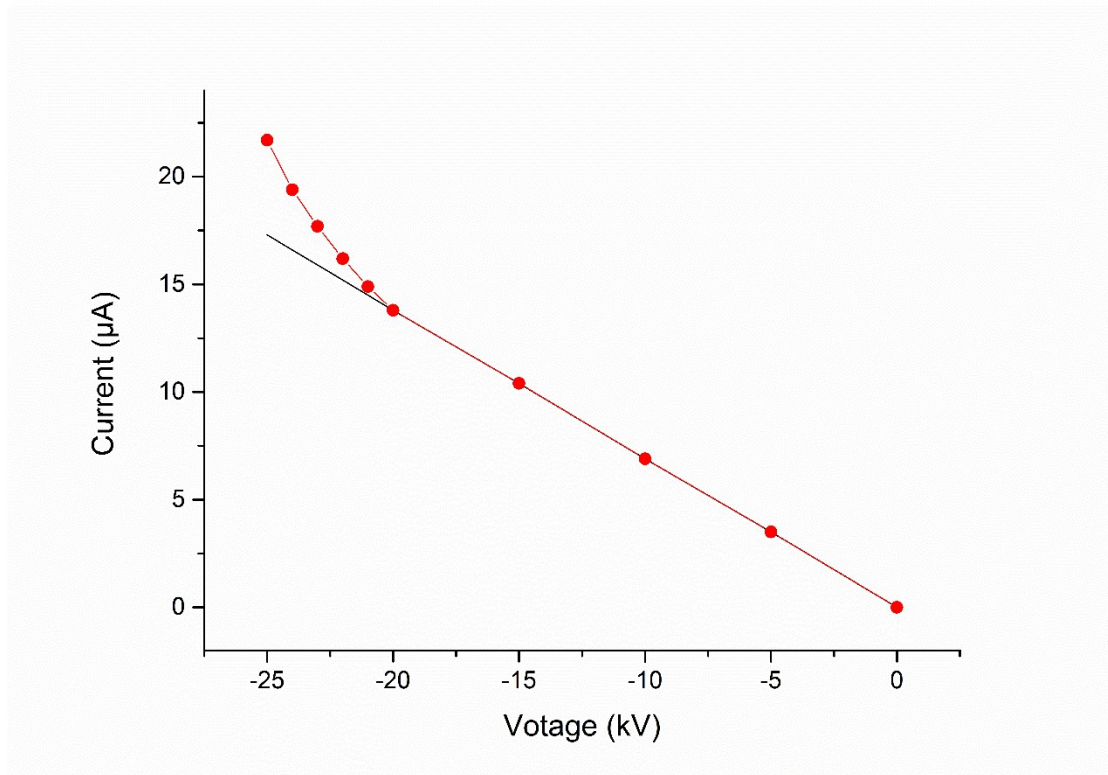


Fig. S2. The relationship between the applied voltage and the produced current for the BGS

Supplement of Tables

Table S1 Effect of pH value of BGS

	pH	Theoretical plate number (USP)	Resolution (USP)
Vanillic acid	12.0	45655	
	12.5	45760	
Ferulic acid	12.0	35947	3.2
	12.5	35888	2.0
IS	12.0	33823	2.0
	12.5	23853	1.7
Cinnamic acid	12.0	41502	5.3
	12.5	35357	3.5

Table S 2 Effect of injection time of micellar solution at 0.5 psi

Compound	Injection time (s)	Theoretical plate number (USP)	Resolution (USP)
Vanillic acid	30	73374	
	40	44383	
Ferulic acid	30	53215	2.8
	40	34388	2.0
IS	30	29107	2.0
	40	23521	1.5
Cinnamic acid	30	53401	4.8
	40	39808	3.6

Table S3 Effect of injection of sample solution at 0.5 psi

Compound	Injection time (s)	Theoretical plate number (USP)	Resolution (USP)
Vanillic acid	15	47701	
	30	54882	
	45	73374	
	60	67474	
	75	52473	
Ferulic acid	15	36766	2.6
	30	55876	2.4
	45	63215	2.8
	60	47864	2.6
	75	42891	2.8
IS	15	27684	2.4
	30	29107	2.4
	45	61134	2.0
	60	26701	1.7
	75	22324	1.0
Cinnamic acid	15	36766	5.9
	30	53401	5.4
	45	67386	4.8
	60	41116	4.3
	75	39592	3.0

Table S4 Effect of injection time of micellar solution and sample solution (ratio at 2/3)

Compound	MS : S	Theoretical plate number (USP)	Resolution (USP)
Vanillic acid	30:45	73374	
	36:54	46583	
	45:67.5	26434	
Ferulic acid	30:45	53215	2.8
	36:54	45788	2.4
	45:67.5	28491	2.1
IS	30:45	29107	2.0
	36:54	17997	1.3
	45:67.5	12926	0.8
Cinnamic acid	30:45	53401	4.8
	36:54	33353	3.5
	45:67.5	16483	2.8