

Transepithelial transport of phenolic acids in *Flos Lonicerae Japonicae* in intestinal Caco-2 cell monolayers

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Fig.SI1 Representative MRM chromatograms of compounds A-E and tinidazole (IS) in Caco-2 cell. ((1) blank HBSS; (2): blank HBSS spiked with the five analytes and IS in LLOQ; (3) Receiver samples in Caco-2 cell transportation at 4 h). (A: neochlorogenic acid, B: chlorogenic acid, C: cryptochlorogenic acid, D: 3, 5-dicaffeoylquinic acid, E: 3, 4-dicaffeoylquinic acid).

Table SI1 Regression data and LLOQs of phenolic acids.

Table SI2 Intra-batch, inter-batch precision and accuracy of phenolic acids.

Table SI3 Recoveries, matrix effects and stability of phenolic acids.

Fig.S11

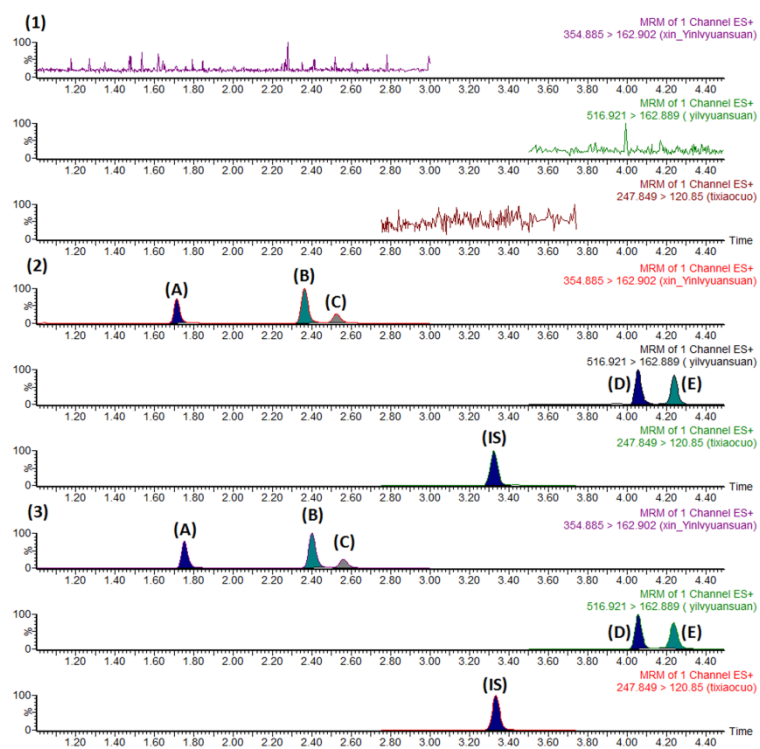


Table SI1 Regression data and LLOQs of phenolic acids.

No.	Analytes	Range (ng·mL ⁻¹)	Linear regression equation	Correlation coefficient	LLOQ (ng·mL ⁻¹)
A	Neochlorogenic acid	10.74-5500.00	$Y=0.02277x+0.09933$	0.9996	10.74
B	Chlorogenic acid	10.83-5543.00	$Y=0.02990x+0.22300$	0.9993	10.83
C	Cryptochlorogenic acid	4.37-2239.00	$Y=0.01872x+0.08180$	0.9971	4.37
D	3, 5-dicaffeoylquinic acid	7.22-3696.00	$Y=0.00615x-0.00400$	0.9995	7.22
E	3, 4-dicaffeoylquinic acid	6.24-3196.00	$Y=0.00514x-0.00488$	0.9988	6.24

Table S12 Intra-batch, inter-batch precision and accuracy of phenolic acids.

Compound	Concentration (ng·mL ⁻¹)	Inter-batch (n=3)		Intra-batch (n=6)	
		Precision (RSD, %)	Accuracy (%)	Precision (RSD, %)	Accuracy (%)
Neochlorogenic acid	21.08	13.43	107.60	7.03	101.10
	274.10	7.96	99.58	6.42	98.33
	3584.00	10.79	110.30	13.22	99.93
Chlorogenic acid	21.25	8.62	95.62	3.61	100.60
	280.50	11.56	94.28	4.92	103.30
	3698.00	14.40	85.03	13.35	92.78
Cryptochlorogenic acid	8.93	5.41	104.60	4.67	105.40
	116.70	8.32	104.30	4.09	98.96
	1494.00	6.83	96.40	0.86	98.42
3, 5-dicaffeoylquinic acid	15.02	12.10	105.00	12.02	104.80
	192.70	14.42	103.00	13.74	85.88
	2465.00	8.20	107.00	1.44	97.59
3, 4-dicaffeoylquinic acid	12.01	7.60	104.50	4.81	102.60
	159.20	6.46	96.15	3.07	103.10
	2132.00	11.19	108.50	2.28	110.90

Table S13 Recoveries, matrix effects and stability of phenolic acids.

Compound	Concentration (ng·mL ⁻¹)	Recovery		Matrix effect		Freeze-thaw cycles		At -70 °C for 1 month		At room temperature for 24h	
		Average (%)	RSD (%)	Average (%)	RSD (%)	Remain (%)	RSD (%)	Remain (%)	RSD (%)	Remain (%)	RSD (%)
Neochlorogenic acid	21.08	81.56	8.86	103.60	6.87	10.73	110.90	14.57	95.06	10.02	104.40
	2741.00	69.48	7.08	106.90	3.67	9.64	110.40	10.08	106.20	7.74	98.32
	3584.00	69.87	8.44	101.50	5.17	7.41	102.30	12.86	97.55	12.87	103.30
Chlorogenic acid	21.25	86.14	3.61	107.00	3.20	1.36	88.60	2.97	99.16	10.83	101.20
	2805.00	84.31	5.92	108.00	1.21	13.5	107.00	9.77	103.20	6.65	104.80
	3698.00	80.45	9.73	101.50	4.51	5.01	94.48	10.64	106.80	11.59	106.40
Cryptochlorogenic acid	8.93	89.50	6.11	107.40	5.95	10.73	110.90	14.57	95.06	10.02	104.40
	1167.00	81.42	4.79	105.00	2.21	9.64	110.40	10.08	106.20	7.74	98.32
	1494.00	80.57	10.32	102.30	3.94	7.41	102.60	12.86	97.55	12.87	103.30
3, 5-dicaffeoylquinic acid	15.02	83.00	11.24	98.34	1.83	7.44	109.80	9.69	110.40	6.87	98.32
	192.70	77.36	9.27	105.60	8.24	7.81	91.58	14.05	102.30	11.81	110.30
	2465.00	83.23	8.64	104.10	3.81	8.61	106.60	13.95	99.24	14.01	114.20
3, 4-dicaffeoylquinic acid	12.01	80.30	4.53	105.00	6.26	11.52	109.20	1.87	114.40	14.10	105.90
	159.20	75.44	13.57	103.40	4.85	12.30	97.38	13.47	87.84	10.46	94.72
	2132.00	72.24	11.38	99.99	5.12	12.47	108.20	11.60	105.70	11.97	100.60