

# Supplementary materials

**Table S1. Matrix effects and extraction recoveries for the analytes in rat plasma**

Analytes	Concentration (ng/mL)	Matrix effect (%, mean $\pm$ SD, n=6)	Recovery (%, mean $\pm$ SD, n=6)
Ferulic acid	100.00	91.70 $\pm$ 3.26	102.70 $\pm$ 4.97
	200.00	88.68 $\pm$ 2.80	100.49 $\pm$ 2.41
	500.00	98.99 $\pm$ 5.31	99.04 $\pm$ 4.10
Caffeic acid	380.00	81.94 $\pm$ 3.24	104.48 $\pm$ 5.80
	3800.00	85.03 $\pm$ 9.17	81.54 $\pm$ 3.06
	6000.00	95.54 $\pm$ 6.83	95.55 $\pm$ 7.83
Chlorogenic acid	3500.00	91.35 $\pm$ 4.79	100.07 $\pm$ 5.27
	40400.00	99.34 $\pm$ 7.87	99.48 $\pm$ 3.17
	110000.00	95.09 $\pm$ 4.47	95.81 $\pm$ 2.29
Neochlorogenic acid	1000.00	95.75 $\pm$ 4.72	90.14 $\pm$ 4.73
	15000.00	99.46 $\pm$ 8.90	99.29 $\pm$ 5.83
	25000.00	99.63 $\pm$ 3.71	99.28 $\pm$ 3.32
Cryptochlorogenic acid	2000.00	97.98 $\pm$ 2.49	97.94 $\pm$ 6.42
	50000.00	101.71 $\pm$ 3.20	99.30 $\pm$ 7.60
	100000	100.32 $\pm$ 6.42	97.65 $\pm$ 4.42
Isochlorogenic acid B	2000.00	101.26 $\pm$ 6.32	99.13 $\pm$ 7.56
	80000.00	99.45 $\pm$ 12.51	99.83 $\pm$ 4.23
	160000.00	99.88 $\pm$ 4.49	103.60 $\pm$ 3.72
Isochlorogenic acid C	1500.00	103.02 $\pm$ 5.12	100.54 $\pm$ 3.38
	7500.00	99.03 $\pm$ 7.34	98.80 $\pm$ 4.49
	140000.00	100.43 $\pm$ 4.79	90.31 $\pm$ 5.51
Rutin	600.00	99.57 $\pm$ 4.76	102.72 $\pm$ 3.55
	4000.00	98.70 $\pm$ 3.57	100.86 $\pm$ 6.63
	8000.00	99.11 $\pm$ 4.95	101.40 $\pm$ 4.63
Chloramphenicol (IS)	100.00	90.77 $\pm$ 6.66	92.85 $\pm$ 4.67

**Table S2. Stability of 8 analytes and IS in rat plasma (n=3)**

Analytes	Concentration (ng/mL)	Short-term (RE%)	Long-term (RE%)	Freeze-thaw (RE%)
Ferulic acid	100.00	2.02	2.16	4.78
	200.00	-0.51	3.51	1.65
	500.00	0.79	1.03	1.23
Caffeic acid	380.00	-3.53	-3.82	4.73
	3800.00	1.00	1.23	4.70
	6000.00	1.03	1.97	1.01
Chlorogenic acid	3500.00	0.12	-2.47	-1.34
	40400.00	1.78	-1.56	-1.72
	110000.00	-2.36	-2.94	-2.67
Neochlorogenic acid	1000.00	2.04	2.83	4.96
	15000.00	0.62	-4.71	2.35
	25000.00	1.47	2.60	-3.54
Cryptochlorogenic acid	2000.00	2.36	1.02	1.73
	50000.00	1.54	3.73	1.67
	100000	2.25	2.06	3.86
Isochlorogenic acid B	2000.00	-0.21	2.84	2.90
	80000.00	1.10	2.06	1.59
	160000.00	1.41	-2.26	-1.12
Isochlorogenic acid C	1500.00	1.31	4.77	2.78
	7500.00	-0.29	1.42	3.65
	140000.00	0.87	3.63	2.79
Rutin	600.00	-0.53	-4.09	-2.83
	4000.00	0.77	3.92	-1.23
	8000.00	1.23	3.30	2.31
Chloramphenicol (IS)	100	0.74	-2.22	-4.77