

Supporting information

Development and validation of a LC-MS/MS method for the simultaneous determination of cycloicaritin and its carbamate prodrug in rat plasma: Application to pharmacokinetic study

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Table S1. Recovery for analytes extracted by various extraction solvents

liquid-liquid extraction (LLE)	Extraction recovery (%), Mean \pm SD)	
	CICT	3-L
methyl tert-butyl ether	73.4 \pm 4.9	61.3 \pm 11.6
n-hexane	55.2 \pm 4.9	21.7 \pm 0.4
ethyl acetate	52.5 \pm 2.1	40.0 \pm 6.6
dichloromethane	74.3 \pm 2.2	26.2 \pm 5.4

Table S2. Recovery for analytes extracted by various acidic solvents.

liquid-liquid extraction (LLE)	Extraction recovery (%), Mean \pm SD)	
	CICT	3-L
0.01mol/L hydrochloric acid solution	62.6 \pm 8.4	75.2 \pm 3.3
1 mol/L hydrochloric acid solution	85.5 \pm 7.6	87.6 \pm 5.2
pH 5.0 NH ₄ H ₂ PO ₄ buffer	38.0 \pm 0.7	65.4 \pm 5.1

Table S3. Dilution integrity for assay of analytes in rat plasma (mean \pm SD, n=6).

Analytes	Dilution factors	Added(ng/mL)	Found (ng/mL) Mean \pm SD	Accuracy	Precision
				RE (%)	RSD (%)
CICT	2.5	3000.0	3167.8 \pm 135.8	5.6	4.3
	5	3000.0	3080.6 \pm 79.5	2.7	2.6
3-L	2.5	3000.0	3122.5 \pm 114.5	4.1	3.7
	5	3000.0	2988.3 \pm 107.8	-0.4	3.6

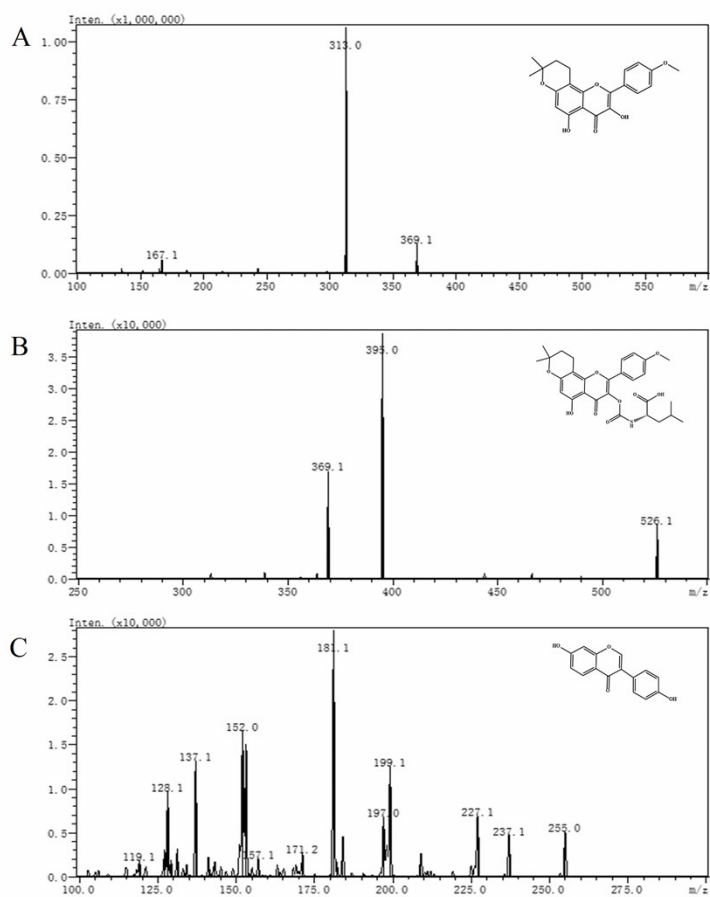


Figure S1. Product ion mass spectra of the $[M+H]^+$ ions of cycloicaritin (A), 3-L (B) and DAN (C).