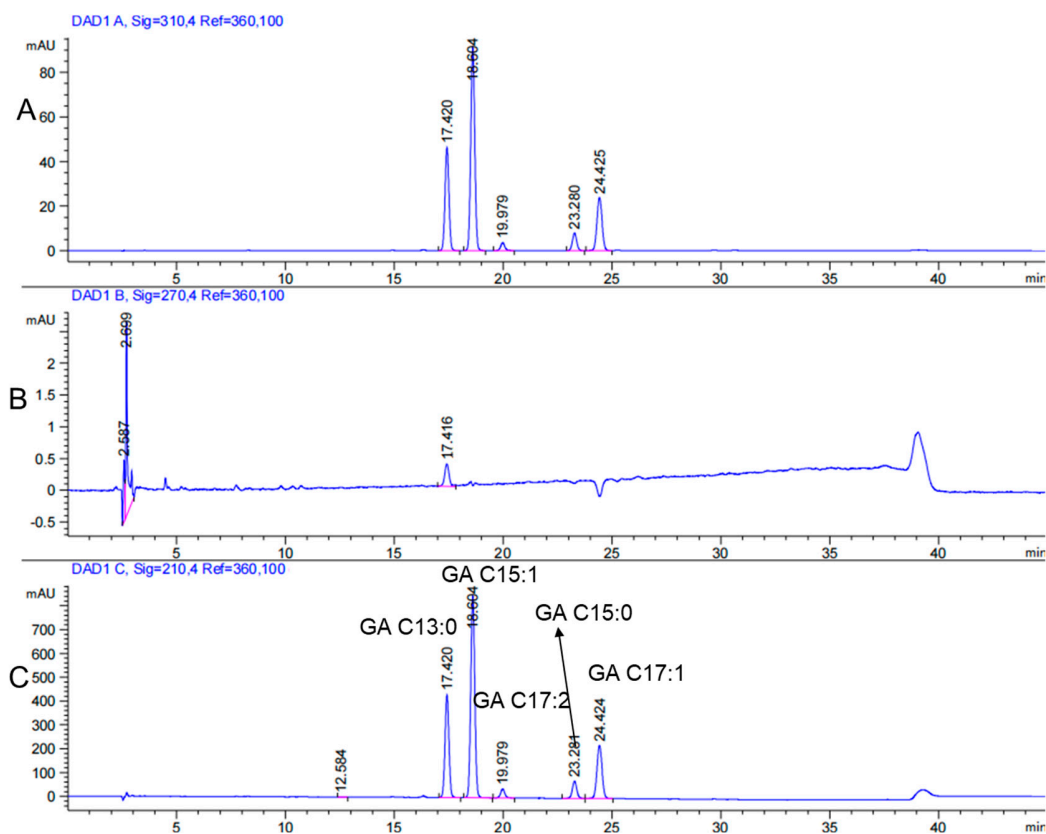


## Supplementary Material



**Figure S1.** Chromatogram of ginkgolic acid mixed standard at 310nm (A), 270 nm (B) and 210 nm (C) by the European Pharmacopoeia methods.

**Table S1.** Linear regression equation, correlation coefficient, linear range, and LOD of ginkgols.

Ginkgol	Standard curve	$R^2$	Linear range (ppm)	Limit of detection (ppm)	Limit of quantification (ppm)
C13:0	$y = 15785x + 3.10$	0.9998	0.35-56.56	0.61	2.01
C15:1	$y = 11592x + 2.81$	0.9999	0.27-53.00	0.50	1.65
C17:1	$y = 8699.9x + 0.57$	0.9999	1.39-69.40	0.06	0.20

**Table S2.** Coefficients of the eigenvectors were taken from different principal components analysis for compounds.

Compound	PC1	PC2	PC3
GA C13:0	0.4222	-0.01345	-0.04245
GA C15:1	0.34351	0.41681	0.19673
GA C17:1	0.35682	0.38546	0.16816
Total GA	0.36034	0.3757	0.16568
G C13:0	-0.14599	0.51813	-0.83165
G C15:1	-0.36905	0.34138	0.16371
G C17:1	-0.38126	0.25864	0.33343
Total ginkgols	-0.37909	0.29064	0.27231

**Table S3.** Pearson correlation showing the relationship between ginkgolic acids and ginkgols.

Compound	GA C13:0	GA C15:1	GA C17:1	Total GA	G C13:0	G C15:1	G C17:1	Total ginkgols
GA C13:0	1							
GA C15:1	0.79504							
GA C17:1	0.82825	0.99835						
Total GA	0.8369	0.99735	0.99988					
G C13:0	-0.33806	0.02387	-0.00352	-0.01451				
G C15:1	-0.87849	-0.43103	-0.48003	-0.49352	0.54769			
G C17:1	-0.91643	-0.49691	-0.54585	-0.55849	0.40163	0.97416		
Total ginkgols	-0.90895	-0.47551	-0.5249	-0.53795	0.45838	0.98759	0.99738	1