

## Supporting information

### **Metabolomics of artichoke bud extract in spontaneously hypertensive rats**

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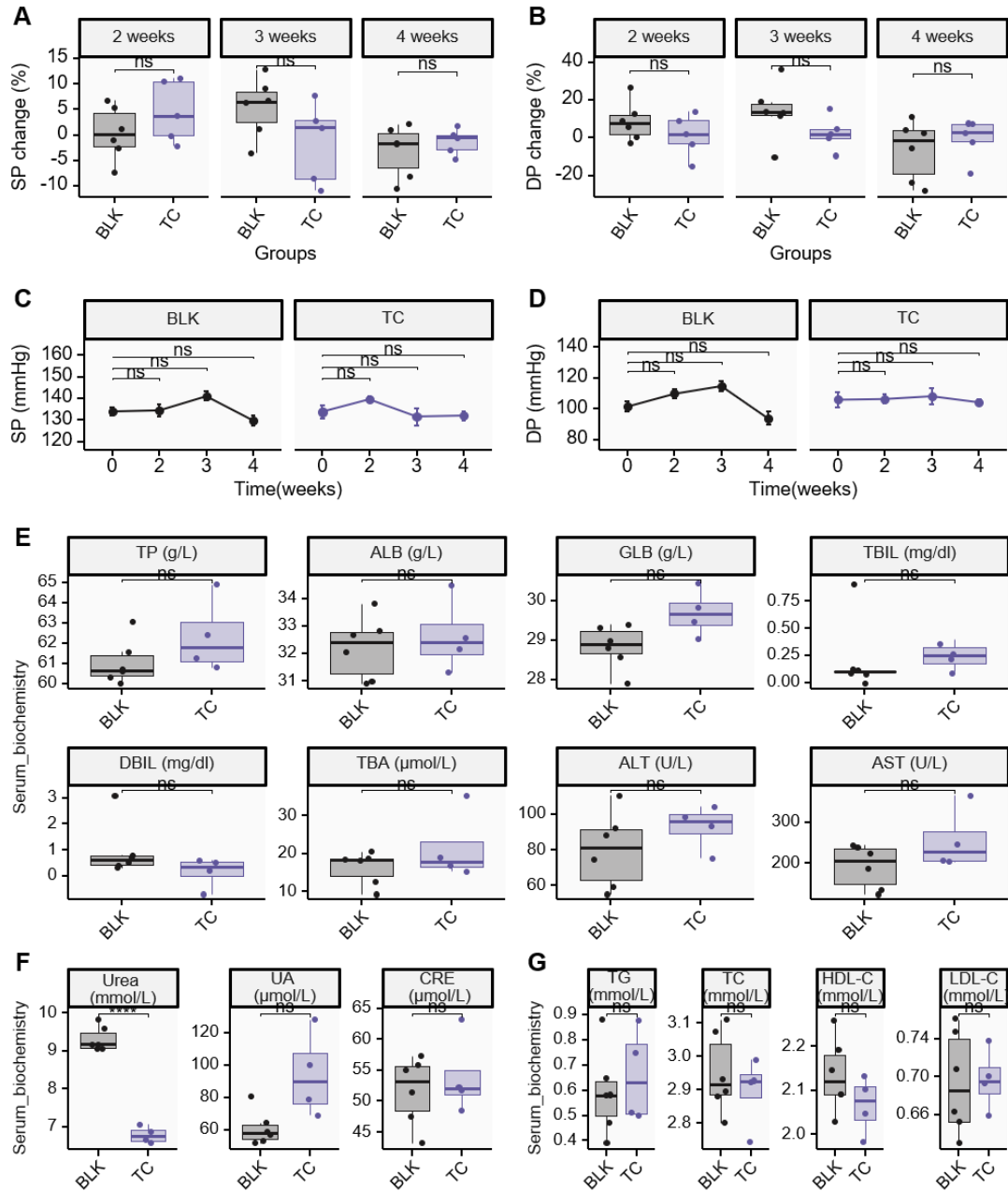
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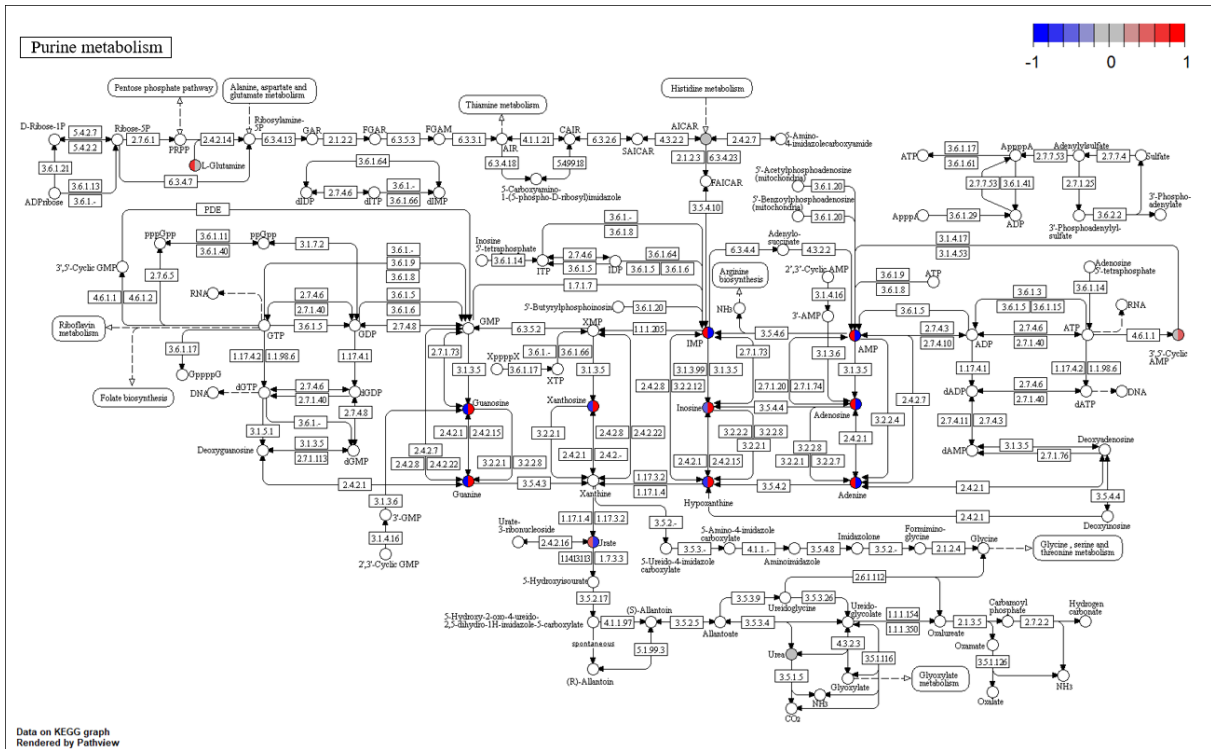
## **Supporting Information**

The toxicity assessment of ABE; log<sub>2</sub> fold changes of metabolites level mapped onto the KEGG pathway module; the chromatograms of artichoke bud extract that used in this study and the standards (chlorogenic acid, cynarin); chemical structures of active components contained in ABE; sequences of primers used for qRT-PCR.

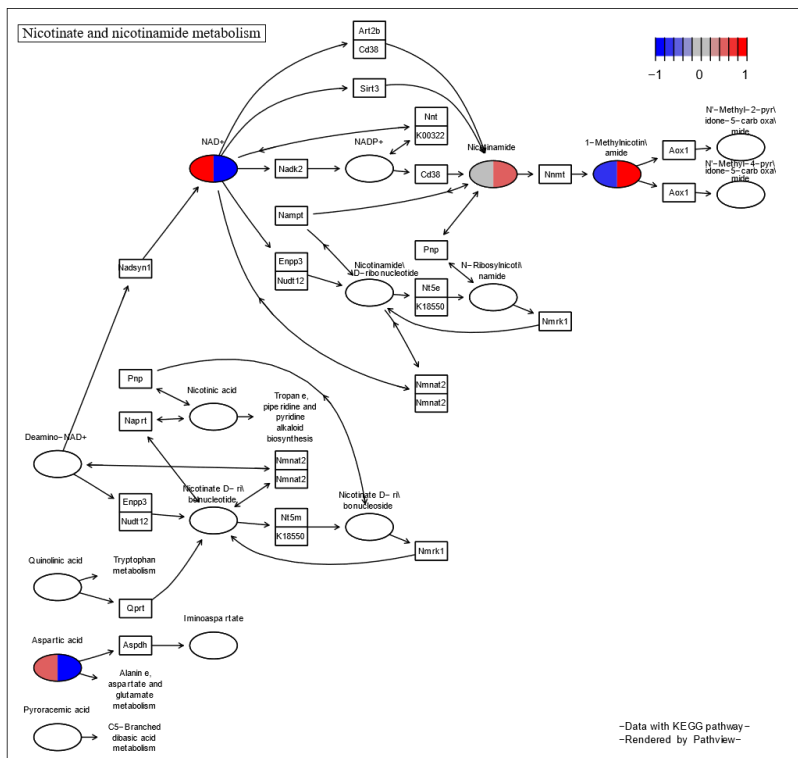


**Figure S1 Toxicity assessment of ABE.** SP change (A) and DP change (B) compared to 0 week of each rat in different groups. SP (C) and DP (D) trend along with time in different groups. n(BLK)=6; n(TC)=5. ns,  $P \geq 0.05$ ; \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ ; \*\*\*\* $P < 0.0001$  (ANOVA with repeated measurements). Effect of ABE on the serum biochemical parameters of WKY rats liver function (E), kidney function (F) and serum lipid profile (G). The bars at each data point in C and D indicate standard deviation. SP, Systolic blood pressure; DP, diastolic blood pressure; BLK, blank; TC, toxicity control, 50 mg/kg/d artichoke bud extract; TP, total protein; ALB, albumin; GLB, globulin; TBIL, total bilirubin; DBIL, direct bilirubin; TBA, total bile acids; ALT, alanine aminotransferase; AST, aspartate aminotransferase; UA, uric acid; CRE, creatinine; TG, triglyceride; TC, cholesterol; HDL-C, high-density lipoprotein cholesterol c; LDL-C, low-density lipoprotein cholesterol c.

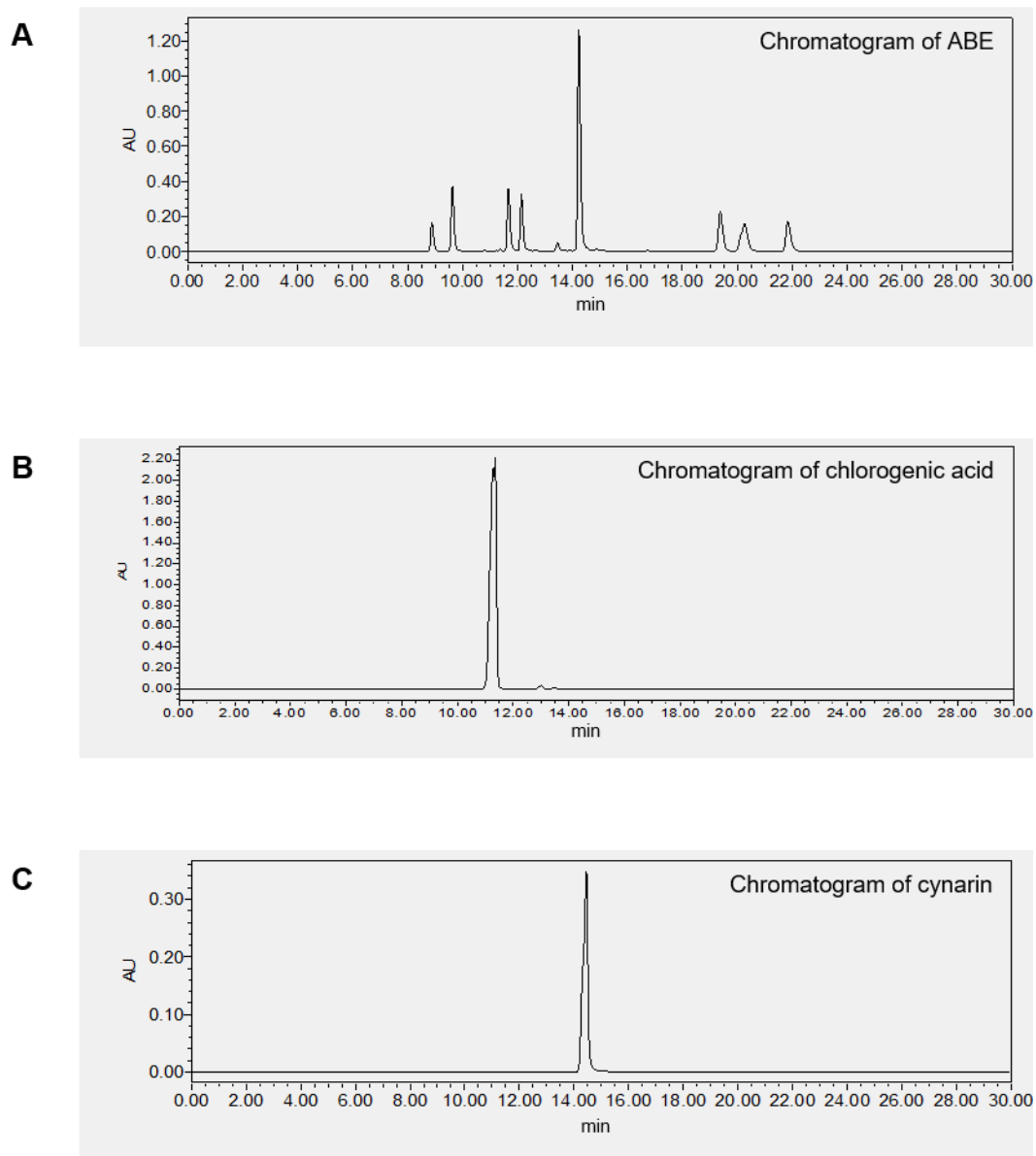
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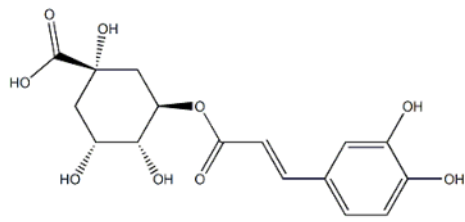
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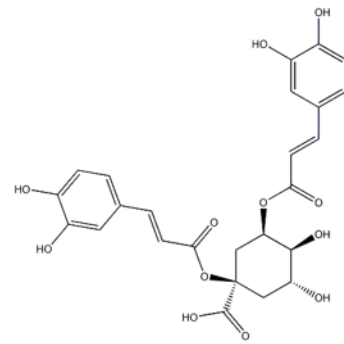
**Figure S2 Log<sub>2</sub> fold changes of metabolites level mapped onto the KEGG pathway module (A) “Purine metabolism” and (B) “Nicotinate and nicotinamide metabolism” by R package “Pathview”. Left half of circle, Group HPM vs. Group BLK; right half of circle, Group ABE\_a vs. Group HPM.**



**Figure S3** The chromatograms (UV 330 nm) of artichoke bud extract that used in this study (A) and the standards (B for chlorogenic acid, C for cynarin).

**A**

Chlorogenic acid

**B**

Cynarin

**Figure S4 Chemical structures of active components contained in ABE. A for chlorogenic acid, B for cynarin.**

**Table S1 Sequences of primers used for qRT-PCR.**

Name	Direction	Sequence (5'-3')
<i>Actb</i> -rat	Forward	GGGAAATCGTGCGTGACATT
	Reverse	GCGGCAGTGGCCATCTC
<i>Prdx2</i> -rat	Forward	CTTCGCCAGATCACAGTCAA
	Reverse	ATACTGAAAGGCCTGGACGA
<i>Sod2</i> -rat	Forward	ATTAACGCGCAGATCATGCA
	Reverse	CCTCGGTGACGTTGAGATTGT
<i>Gpx4</i> -rat	Forward	GCCGTCTGAGCCGCTTATT
	Reverse	ACGCAACCCCTGTACTTATCCA
<i>Gsr</i> -rat	Forward	ACTTCTCACCCCAGTTGCG
	Reverse	CCACGGTAGGGATGTTGTCA