

SUPPORTING INFORMATION

Chinese sumac fruits (*Rhus chinensis* Mill.) alleviate type 2 diabetes in C57BL/6 mice through repairing islet cell function, regulating IRS-1/PI3K/AKT pathway and promoting the entry of Nrf2 into the nucleus

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Table S1. Phytochemical identification of ethanol extracts from *Rhus chinensis* Mill. fruits by UHPLC-ESI-HRMS/MS

Peak No.	Compounds	Retention Time (min)	[M-H] ⁻ (m/z)	Molecular Formula	MS2/MS fragment ions
1	Malic acid	1.28	133.0131	C ₄ H ₆ O ₅	115.0024, 71.0125
2	Citric acid	1.67	191.0190	C ₆ H ₈ O ₇	87.0074, 111.0075, 57.0332
3	Gallic acid	1.86	169.0134	C ₇ H ₆ O ₅	69.0332, 125.0232, 124.0154
4	Di-O-galloyl-glucoside	2.47	483.0779	C ₂₀ H ₂₀ O ₁₄	169.0135, 125.0233, 331.0682
5	Di-O-galloyl-glucoside (isomer)	3.00	483.0777	C ₂₀ H ₂₀ O ₁₄	169.0134, 125.0233, 331.0674
6	Protocatechuic acid	3.05	153.0186	C ₇ H ₆ O ₄	108.0204, 109.0288, 91.0176
7	Digallic acid I	4.02	321.0256	C ₁₄ H ₉ O ₉	125.0233, 169.0135
8	Trigalloyl glucose I	4.67	635.0900	C ₂₇ H ₂₄ O ₁₈	169.0134, 635.0901, 483.0786
9	Digallic acid II	4.96	321.0255	C ₁₄ H ₁₀ O ₉	125.0233, 169.0135
10	Trigalloyl glucose II	5.85	635.0887	C ₂₇ H ₂₄ O ₁₈	635.0900, 169.0134, 483.0786
11	Myricetin-3-O- (6''-galloyl) glycoside	8.29	631.0950	C ₂₈ H ₂₃ O ₁₇	479.08369, 631.0956
12	Myricetin-3-O-galactoside	9.12	479.0878	C ₂₁ H ₂₀ O ₁₃	316.0226, 317.0277
13	Tetragalonyl glucose	9.45	787.1008	C ₃₄ H ₂₈ O ₂₂	169.0134, 635.0898
14	Myricetin-3-O-rhamnoside	9.86	463.0889	C ₂₁ H ₂₀ O ₁₂	316.0227, 317.0285
15	Luteolin-7-O-glucoside	10.09	447.0941	C ₂₁ H ₂₀ O ₁₁	285.0407, 284.0329
16	Quercetin-3-O-arabinoside	10.45	433.0783	C ₂₀ H ₁₈ O ₁₁	300.0279, 301.0331
17	Quercetin-3-O-rhamnoside	10.69	447.0934	C ₂₁ H ₂₀ O ₁₁	300.0279, 301.0351
18	Myricetin O-gallate	11.07	615.1002	C ₂₈ H ₂₄ O ₁₆	317.0305, 169.0134
19	Kaempferol-3-O-hexoside	11.34	431.0986	C ₂₁ H ₂₀ O ₁₀	284.0330, 285.0406, 255.0300
20	Anacardic acid (17:3)	23.17	369.2437	C ₂₄ H ₃₄ O ₃	119.0490, 325.2539
21	Anacardic acid (15:1)	24.18	345.2439	C ₂₂ H ₃₄ O ₃	301.2538
22	Anacardic acid (17:2)	24.84	371.2596	C ₂₄ H ₃₆ O ₃	327.2696

Figure S1. The chromatograms of phenolic-rich fraction from *Rhus chinensis* Mill. Peak identification and their MS data are shown in Table S1.

