

***Poria cocos* attenuated DSS-induced ulcerative colitis via NF-κB signaling pathway and regulating gut microbiota**

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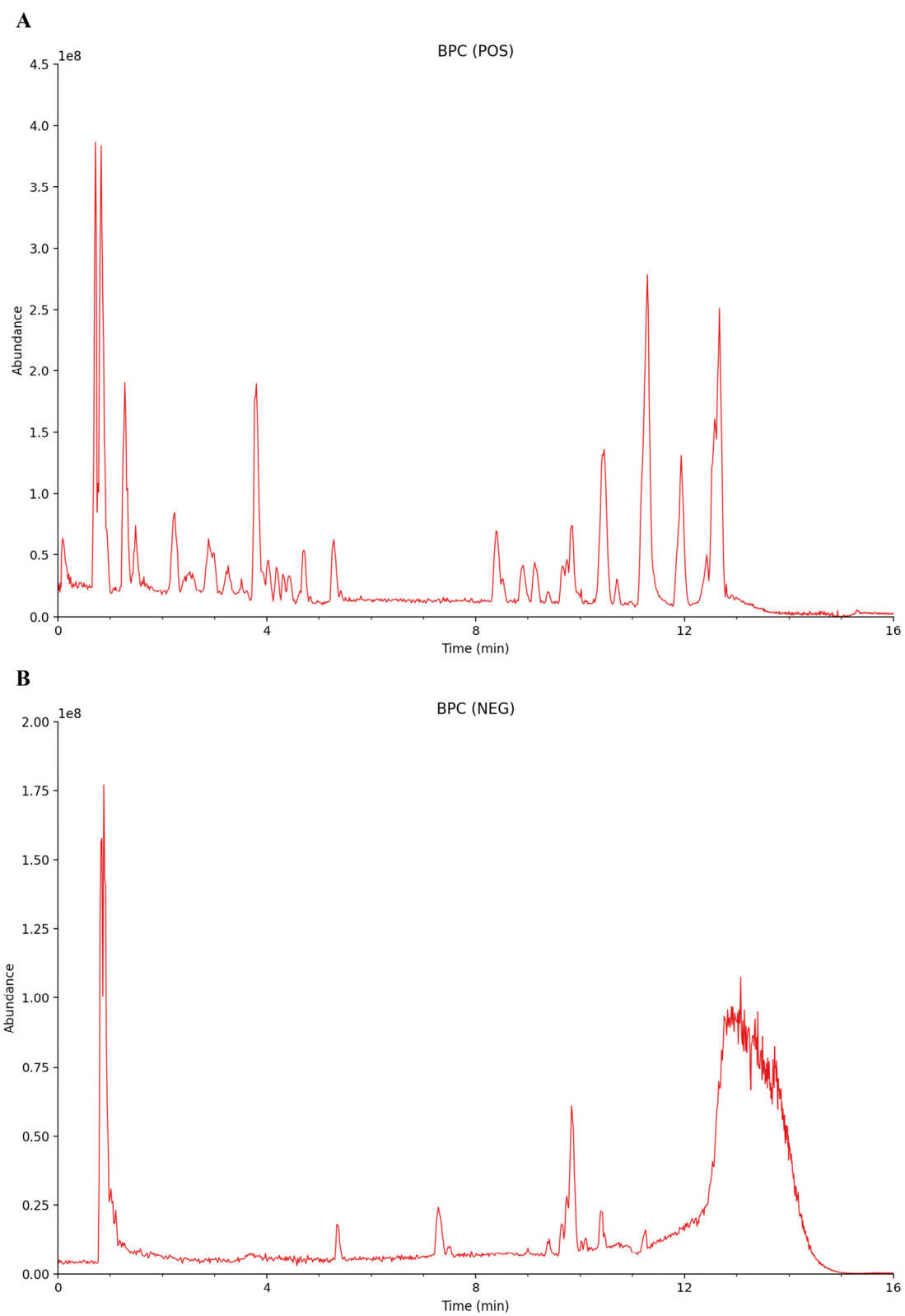
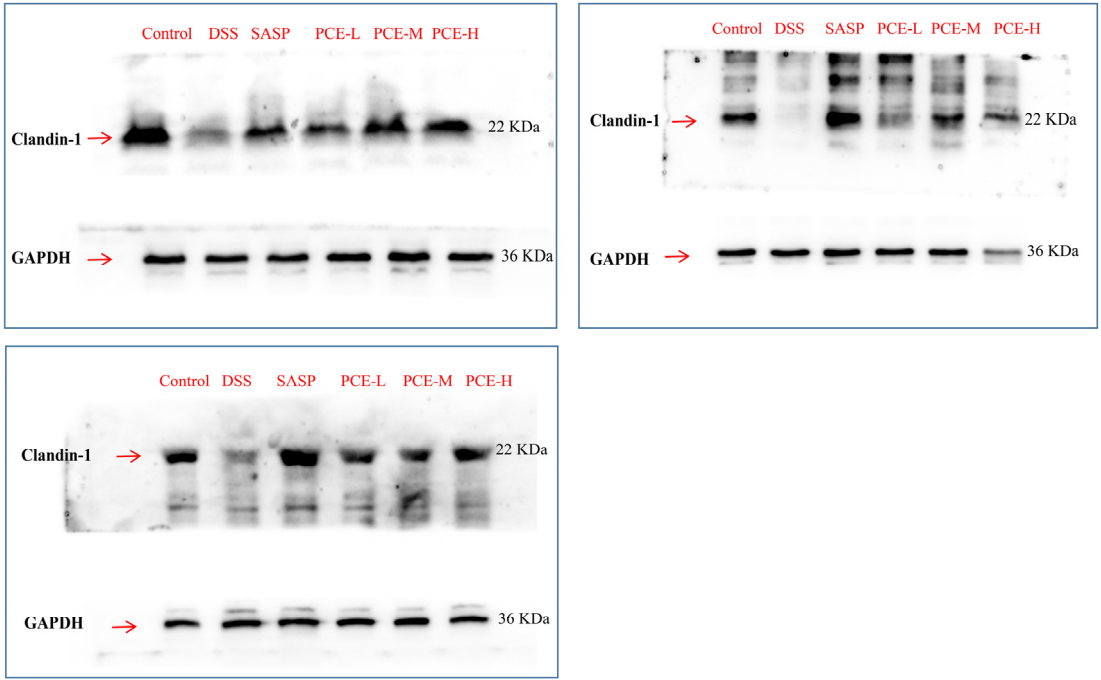
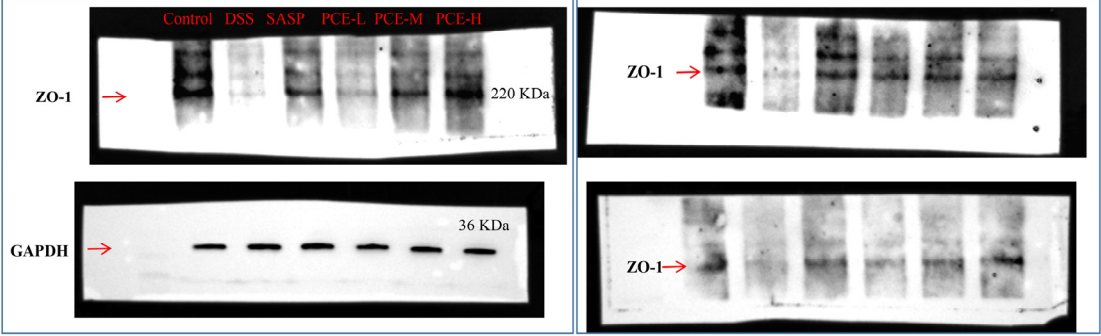


Figure S1. Base peak chromatograms of PCE in positive (**A**) and negative (**B**) mode.

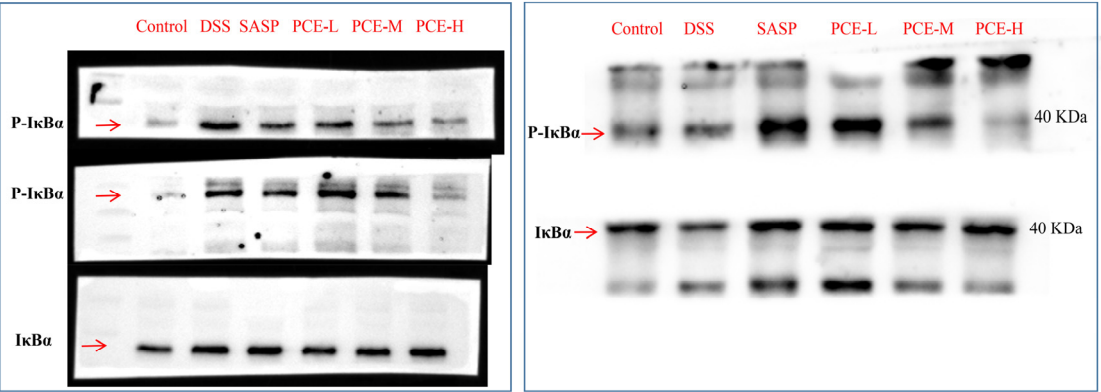
A. The expression of Claudin-1 was assessed



B. The expression of ZO-1 was assessed



C. The expression of P-IκBα /IκBα was assessed



D. The expression of NF- κ B p65 was assessed

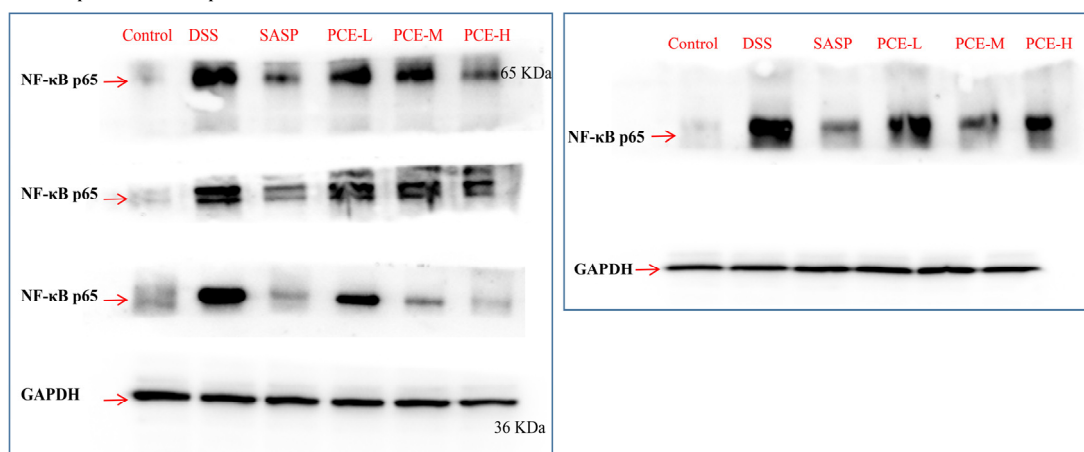


Figure S2. The original unadjusted and uncropped western blot images

Table S1 Characterization of compounds identified from *Poria cocos* by UPLC-Q-Exactive-MS.

No.	T _R (min)	Selected ion	Measured mass	Error (ppm)	Formula	Fragmentations (<i>m/z</i>)	Identified compounds	Identification level (A and B)	Type of compounds
1	0.73	[M+NH ₄] ⁺	133.0974	1.74	C ₅ H ₉ NO ₂	60.0564, 70.0658, 72.0815, 73.0848, 74.0244, 88.0398, 116.0708	L-Proline	A	Amino acid
2	0.77	[M+H] ⁺	175.1192	1.17	C ₆ H ₁₄ N ₄ O ₂	112.0872, 116.0708, 130.0975, 137.5001, 140.0027, 149.0080, 149.5085, 157.1082, 175.1189	L-Arginine	A	Amino acid
3	0.8	[M+H] ⁺	156.0769	1.14	C ₆ H ₉ N ₃ O ₂	95.0608, 110.0715, 156.0766	L-Histidine	A	Amino acid
4	0.83	[M+H] ⁺	120.0659	2.81	C ₄ H ₉ NO ₃	56.0503, 74.0607, 102.0552, 120.0655	L-Threonine	A	Amino acid
5	0.83	[M+H] ⁺	166.0534	0.97	C ₅ H ₁₁ NO ₃ S	56.0503, 74.0243, 102.0553, 149.0265, 166.0527	Methionine sulfoxide	A	Amino acid
6	0.84	[M-H] ⁻	181.072	1.05	C ₆ H ₁₄ O ₆	71.0139, 73.0296, 85.0296, 89.0245, 101.0245, 113.0245, 119.0350, 131.0350, 163.0614, 181.0719	Allitol	A	Carbohydrates
7	0.84	[M+H] ⁺	134.045	1.52	C ₄ H ₇ NO ₄	57.0342, 60.0451, 69.0342, 70.0658, 74.0243, 88.0397, 116.0344, 134.045	L-Aspartic acid	A	Amino Acids
8	0.84	[M-H] ⁻	151.0614	1.18	C ₅ H ₁₂ O ₅	85.0295, 87.0088, 89.0245, 101.0244, 113.0244, 119.0350, 131.0351, 133.0507, 151.0400, 151.0612	Arabinitol	A	Carbohydrates
9	0.86	[M+H] ⁺	153.0759	1.01	C ₅ H ₁₂ O ₅	71.0498, 73.0291, 99.0444, 117.0548, 152.0567, 152.0699, 153.0404	Ribitol	A	Carbohydrates
10	0.87	[M+H] ⁺	222.0974	0.76	C ₈ H ₁₅ NO ₆	126.0550, 134.0273, 134.0446, 138.0548, 144.0654, 168.0653, 186.0759, 204.0864, 222.0965	N-Acetyl-D-glucosamine	A	Carbohydrates
11	0.93	[M-H] ⁺	191.02	1.19	C ₆ H ₈ O ₇	72.9931, 85.0295, 87.0088, 111.0088, 129.0195, 191.02	Citric acid	A	Organic acids

12	0.93	[M+FA-H] ⁻	289.0677	-0.3	C ₉ H ₁₂ N ₂ O ₆	110.0248, 111.0202, 128.0352, 152.0354, 200.0562, 243.0617	Uridine	A	Nucleotides
13	0.93	[M-H] ⁻	323.0285	-0.26	C ₉ H ₁₃ N ₂ O ₉ P	78.9591, 96.9601, 96.9696, 111.0201, 124.9914, 138.9801, 211.0017, 323.0278	Uridine 5'-monophosphate	A	Nucleotides
14	0.93	[M-H] ⁻	177.0407	1.31	C ₆ H ₁₀ O ₆	101.0246, 113.0254, 117.0194, 129.0197, 133.0298, 147.0304, 158.9256, 176.9364, 177.0187, 177.0412	1,4-D-Gulonolactone	A	Carbohydrates
15	1.21	[M+H] ⁺	130.0501	1.94	C ₅ H ₇ NO ₃	70.0658, 84.0449, 84.0813, 87.0045, 113.9638, 129.0182, 130.0499	Pyroglutamic acid	A	Amino acid
16	1.28	[M+H-H ₂ O] ⁺	145.0497	0.88	C ₆ H ₁₀ O ₅	71.0499, 81.0341, 85.0290, 86.0606, 98.0605, 99.0444, 100.0761, 127.0391, 144.0374, 145.0493	2-Hydroxyadipic acid	A	Fatty acid
17	1.28	[M+H] ⁺	268.1041	0.4	C ₁₀ H ₁₃ N ₅ O ₄	136.0617, 268.1035	Adenosine	A	Nucleotides
18	1.37	[M+H] ⁺	284.099	0.22	C ₁₀ H ₁₃ N ₅ O ₅	152.0566	Guanosine	A	Nucleotides
19	1.39	[M+H] ⁺	260.197	0.66	C ₁₂ H ₂₅ N ₃ O ₃	101.1077, 129.1023, 130.0499, 147.0763, 147.1127, 148.0603, 243.1703, 259.1305, 260.1601, 260.1968	Lysylleucine	A	Peptide
20	1.49	[M+H] ⁺	132.1021	1.52	C ₆ H ₁₃ NO ₂	69.0342, 69.0705, 86.0605, 86.0969, 87.0445, 97.0288, 115.0755	L-Leucine	A	Amino acid
21	2.24	[M+H] ⁺	328.1392	0.22	C ₁₅ H ₂₁ NO ₇	120.081, 132.0808, 166.0862, 178.086, 264.1233, 292.1176, 310.1282, 328.1392	N-(1-Deoxy-1-fructosyl) phenylalanine	A	Amino acid
22	2.61	[M+H] ⁺	246.145	0.65	C ₁₀ H ₁₉ N ₃ O ₄	200.1395, 201.1237, 211.1080, 212.0913, 228.1342, 229.1183, 245.0993, 246.0739, 246.1119, 246.1390	Asparaginyllisoleucine	A	Peptide
23	2.81	[M+H] ⁺	281.1497	0.34	C ₁₄ H ₂₀ N ₂ O ₄	55.0551, 72.0815, 120.0809, 136.0613, 136.0758, 149.0235, 182.0811, 281.1491	Valyltyrosine	A	Peptide

24	2.88	[M+H] ⁺	189.1235	0.64	C ₈ H ₁₆ N ₂ O ₃	86.0969, 97.1017, 125.0963, 132.1019, 143.1177, 189.1016, 189.125	Glycyl-Isoleucine	A	Peptide
25	3.6	[M+H] ⁺	253.1186	1.09	C ₁₂ H ₁₆ N ₂ O ₄	60.0452, 70.0658, 86.0969, 120.081, 166.0862, 207.1126, 235.1072, 253.1185	Serylphenylalanine	A	Peptide
26	3.71	[M+H] ⁺	231.1706	1.28	C ₁₁ H ²² N ₂ O ₃	70.0658, 72.0814, 86.0969, 185.1655, 231.1705	Isoleucyl-Valine	A	Peptide
27	3.93	[M+H] ⁺	231.1707	1.68	C ₁₁ H ₂₂ N ₂ O ₃	72.0814, 132.1019, 231.17	Valylleucine	A	Peptide
28	4.23	[M+H] ⁺	265.155	1.34	C ₁₄ H ₂₀ N ₂ O ₃	55.0551, 72.0814, 102.0553, 120.0809, 146.06, 166.0857, 265.1544	Valylphenylalanine	A	Peptide
29	5.82	[M+H] ⁺	595.2018	-0.52	C ₂₈ H ₃₄ O ₁₄	161.0594, 171.0284, 195.0291, 263.0549, 287.0910, 329.1022, 397.1285, 415.1377, 433.1492, 449.1445, 595.2018	Didymin	A	Flavonoid
30	6.01	[M-H] ⁻	201.1134	0.96	C ₁₀ H ₁₈ O ₄	132.0564, 139.1128, 156.1026, 157.1232, 175.0625, 183.1024, 201.113	Sebacic acid	A	Fatty acid
31	6.75	[M-H] ⁻	215.1289	-0.04	C ₁₁ H ₂₀ O ₄	153.1283, 197.1183, 215.0098, 215.1284	Undecanedioic acid	A	Fatty acid
32	6.94	[M+H-H ₂ O] ⁺	459.3101	-0.74	C ₂₈ H ₄₄ O ₆	459.3101	Polyporusterone B	B	Steroid
33	7.4	[M+H-H ₂ O] ⁺	443.279	-0.35	C ₂₇ H ₄₀ O ₆	293.2263, 311.2364, 375.2116, 407.2573, 425.2682, 443.2793	Lucidenic acid N	A	Triterpene
34	9.43	[M+H] ⁺	501.3574	-0.08	C ₃₁ H ₄₈ O ₅	109.1016, 309.2211, 437.3416, 465.3379, 483.3476, 501.3578	29-hydroxydehydrotumulosic acid	B	Triterpene
35	9.78	[M+H-H ₂ O] ⁺	471.347	0.19	C ₃₀ H ₄₈ O ₅	173.1325, 187.1481, 295.2414, 311.2357, 313.2524, 411.2519, 435.3256, 453.3361, 471.3466	Caulophyllogenin	A	Triterpene

36	9.84	[M+H-H ₂ O] ⁺	481.3311	-0.29	C ₃₁ H ₄₆ O ₅	221.1324, 223.1476, 267.1750, 307.2043, 309.2208, 325.2166, 417.3165, 445.3123, 463.3246, 481.3364	6 α -Hydroxypolyporenic acid C	B	Triterpene
37	9.96	[M+Na] ⁺	537.3202	3.04	C ₃₁ H ₄₆ O ₆	431.2968, 459.2907, 477.2989, 491.3156, 519.3114, 537.3225	Poricoic acid D	B	Triterpene
38	10.04	[M+FA-H] ⁻	545.3488	0.82	C ₃₁ H ₄₈ O ₅	59.0139, 75.0087, 85.0659, 429.2661, 447.2751, 499.3433, 545.3464	25-hydroxy-3-epidehydrotumulosic acid	B	Triterpene
39	10.33	[M+H] ⁺	469.3316	0.79	C ₃₀ H ₄₆ O ₅	95.0859, 223.148, 293.226, 311.2366, 433.3099, 451.3201, 469.3315	Quillaic acid	A	Triterpene
40	10.63	[M+H-H ₂ O] ⁺	467.3158	0.42	C ₃₀ H ₄₄ O ₅	293.2257, 307.2055, 325.2158, 353.2476, 407.2555, 431.2941, 449.3035, 449.3430, 466.3396, 467.3143	Poricoic acid B	A	Triterpene
41	10.88	[M+H] ⁺	499.3418	0.01	C ₃₁ H ₄₆ O ₅	307.2060, 309.2206, 313.2752, 325.2152, 439.3222, 445.3099, 463.3225, 481.3320, 499.3358, 499.3483	Poricoic acid A	A	Triterpene
42	10.89	[M-H] ⁻	497.3272	-0.04	C ₃₁ H ₄₆ O ₅	423.2887, 497.3271	Poricoic acid BM	B	Triterpene
43	10.94	[M+H] ⁺	487.342	0.43	C ₃₀ H ₄₆ O ₅	173.1325, 185.1325, 309.2209, 327.2317, 433.3105, 451.3194, 468.3546, 469.3230, 487.3452, 487.3509	Poricoic acid G	B	Triterpene
44	11.12	[M+H] ⁺	485.363	0.95	C ₃₁ H ₄₈ O ₄	159.1170, 293.2261, 311.2362, 449.2987, 449.3427, 466.3399, 467.3058, 467.3500, 484.3590, 485.3661	Dehydrotumulosic acid	A	Triterpene
45	11.2	[M+H] ⁺	487.3789	1.51	C ₃₁ H ₅₀ O ₄	295.2427, 451.3553, 469.3652, 487.3761	Tumulosic acid	B	Triterpene
46	11.22	[M+H] ⁺	483.3468	-0.12	C ₃₁ H ₄₆ O ₄	223.1479, 309.2206, 447.3298, 465.3406, 483.3468	Polyporenic acid C	A	Triterpene
47	11.23	[M+H] ⁺	543.368	-0.03	C ₃₃ H ₅₀ O ₆	277.1786, 293.2258, 295.2418, 353.2473, 447.3271, 465.3362, 483.3495, 507.3467, 525.3582, 543.3691	29-hydroxydehydropachymic acid	B	Triterpene
48	11.48	[M+FA-H] ⁻	587.3952	-0.23	C ₃₅ H ₅₆ O ₇	541.3528, 587.3963	6 α -Hydroxy-dehydropachymic acid	B	Triterpene

49	11.72	[M-H] ⁻	511.3428	-0.22	C ₃₂ H ₄₈ O ₅	511.3428	Poricoic acid AM	B	Triterpene
50	11.87	[M-H] ⁻	525.3586	0.09	C ₃₃ H ₅₀ O ₅	59.0139, 525.3583	Poricoic acid AE	B	Triterpene
51	12.07	[M-H] ⁻	513.3584	-0.29	C ₃₂ H ₅₀ O ₅	513.3584	3-O-Acetyl-16 α -hydroxytrametenolic acid	B	Triterpene
52	12.4	[M-H] ⁻	527.3742	-0.01	C ₃₃ H ₅₂ O ₅	527.3742	Pachymic acid	B	Triterpene

* A denotes the compound was identified using a pure standard, while B indicates putative identification based on data from an online database.

Table S2. The standard curve of glucose was established by anthrone-vitriol method

1%Glucose solution/ml	0	0.2	0.4	0.6	0.8
Water/ml	1.0	0.8	0.6	0.4	0.2
Absorbance value	0	0.7583	1.4942	2.1136	2.8063
Standard curve	$y = 3.5606x + 0.0256$ ($R^2 = 0.9989$)				

Table S3. The quantification of the content of PC polysaccharides.

Group	1	2	3	4	5	6	7	8
Absorbance value	1.2416	1.1885	1.1094	1.0577	1.2462	1.1444	1.1105	1.2288
Average value	1.1659							
Content of polysaccharide	80.06%							

Table S4. Primer sequence for qPCR.

Gene name	Forward Primer	Reverse Primer
TNF- α	ACCCTCACACTCAGATCATCTTC	TGGTGGTTTGCTACGACGT
IL-6	CCAGTTGCCTTCTTGGGACT	CTGGTCTGTTGTGGGTGGTA
IL-1 β	AGCAACAACATAAGCGTCAT	CCTCAAACCTGGCAATACTC
GAPDH	GAAGGTCGGTGTGAACGGAT	CCCATTTGATGTTAGCGGGAT