

**Title:** Effects of Mao Tea from Nankun Mountain on nonalcoholic fatty liver disease in mice

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## Supplementary Tables

Supplementary Table S1. The primer sequences for the targeted genes

Gene	Forward	Reverse
<i>Srebf1</i>	GCAGCCACCATCTAGCCTG	CAGCAGTGAGTCTGCCTTGAT
<i>Fasn</i>	GGAGGTGGTGATAGCCGGTAT	TGGGTAATCCATAGAGCCAG
<i>Acaca</i>	CTTCCTGACAAACGAGTCTGG	CTGCCGAAACATCTCTGGGA
<i>Ppara</i>	AGAGCCCCATCTGTCCTCTC	ACTGGTAGTCTGCAAAACCAA A
<i>Il-1<math>\beta</math></i>	GCAACTGTTCTGAACTCAACT	ATCTTTTGGGGTCCGTCAACT
<i>Tnf-<math>\alpha</math></i>	GCCTCTTCTCATTCCCTGCTT	TGGGAACTTCTCATCCCTTTG
<i>Il-6</i>	TAGTCCTTCTACCCCAATTTC C	TTGGTCCTTAGCCACTCCTTC
<i>Gapdh</i>	CTGGGCTACACTGAGCACC	AAGTGGTCGTTG AGGGCAATG

Supplementary Table S2. HPLC-Q-TOF-MS/MS analysis of MTE

NO	<i>t</i> R/min	Formula	Observed m/z	Calculate d m/z	Error (ppm)	MS/MS	Identification	Ref.
1	3.925	C <sub>13</sub> H <sub>16</sub> O <sub>10</sub>	331.0655	331.0665	-3.10	331.0655, 169.0171	6-O- Galloylglucose	1
2	5.073	C <sub>14</sub> H <sub>16</sub> O <sub>10</sub>	343.0663	343.0665	-0.66	343.0663, 191.0598, 169.0177	Theogallin	2
3	5.239	C <sub>7</sub> H <sub>6</sub> O <sub>5</sub>	169.0119	169.0137	-1.06	169.0119, 125.0273, 97.032,	Gallic acid	2
4	8.318	C <sub>7</sub> H <sub>8</sub> N <sub>4</sub> O <sub>2</sub>	181.073	181.0726	2.48	181.0730, 163.0613, 138.0665	Theobromine	2
5	8.893	C <sub>15</sub> H <sub>14</sub> O <sub>7</sub>	305.0651	305.0661	-3.38	305.0651, 167.0379, 165.0228, 137.0271, 125.0276,	Gallocatechin	2
6	8.893	C <sub>15</sub> H <sub>14</sub> O <sub>7</sub>	305.0651	305.0661	-3.38	305.0651, 167.0379, 165.0228, 137.0271, 125.0276,	Epigallocatechin  (Epi)gallocatechi	2
7	9.39	C <sub>30</sub> H <sub>26</sub> O <sub>13</sub>	593.1301	593.1295	0.98	593.1301, 425.0925	n-(epi)catechin isomer I	3

8	10.052	C <sub>30</sub> H <sub>26</sub> O <sub>13</sub>	593.1303	593.1295	1.32	593.1303,467.1023, 441.0872, 425.0928, 407.0822, 289.0757, 177.0228, 125.0272, 483.0786, 423.0593,	(Epi)catechin- (epi)gallocatechi n isomer I	3
9	10.891	C <sub>20</sub> H <sub>20</sub> O <sub>14</sub>	483.0786	483.0775	2.31	271.0498, 241.0403, 211.023, 169.0173, 125.0272	di-galloylglucose isomer I	4
10	11.299	C <sub>30</sub> H <sub>26</sub> O <sub>13</sub>	593.1303	593.1295	1.32	593.1303,467.1023, 425.0928, 407.0822, 289.0757, 177.0228, 125.0272,	(Epi)gallocatechi n-(epi)catechin isomer II	3
11	11.564	C <sub>16</sub> H <sub>18</sub> O <sub>9</sub>	353.0874	353.0873	0.40	353.0924, 191.0596, 179.0386, 173.0487, 161.0266, 135.0481,	Neochlorogenic acid	2
12	14.744	C <sub>21</sub> H <sub>20</sub> O <sub>14</sub>	495.0761	495.0775	-2.80	495.0811, 343.0725, 191.0581, 169.0181	di-GQA	2
13	15.484	C <sub>30</sub> H <sub>26</sub> O <sub>13</sub>	593.1292	593.1295	-0.54	593.1353,467.1023, 425.0928, 407.0822, 289.0757, 177.0228, 125.0272,	(Epi)catechin- (epi)gallocatechi n isomer II	3
14	16.036	C <sub>30</sub> H <sub>26</sub> O <sub>12</sub>	577.1337	577.1346	-1.57	577.1387, 451.1087, 407.0819, 289.0763, 161.0274, 125.0272	Procyanidin B1	2
15	16.036	C <sub>30</sub> H <sub>26</sub> O <sub>12</sub>	577.1358	577.1346	2.07	577.1387, 451.1087, 407.0819, 289.0763, 161.0274, 125.0272	Procyanidin B2	2
16	16.146	C <sub>16</sub> H <sub>18</sub> O <sub>8</sub>	337.0925	337.0923	0.46	337.0975, 191.0595, 163.0439, 119.0531	3-p-CoQA	5, 6
17	16.555	C <sub>20</sub> H <sub>20</sub> O <sub>14</sub>	483.0786	483.0775	2.31	483.0829, 423.0593, 271.0498, 241.0403, 211.023, 169.0173, 125.0272	di-galloylglucose isomer II	4
18	17.592	C <sub>16</sub> H <sub>18</sub> O <sub>9</sub>	353.0874	353.0873	0.40	353.0924, 191.0596, 179.0386, 173.0487, 161.0266, 135.0481, 289.0761, 245.0864,	Chlorogenic acid	2
19	17.813	C <sub>15</sub> H <sub>14</sub> O <sub>6</sub>	289.0711	289.0712	-0.40	125.0276, 123.048, 109.0323, 97.0321	Catechin	2
20	18.052	C <sub>8</sub> H <sub>10</sub> N <sub>4</sub> O <sub>2</sub>	195.0878	195.0882	-2.06	195.0878, 138.0659, 110.0710, 69.0444	Caffeine	2
21	18.332	C <sub>20</sub> H <sub>20</sub> O <sub>14</sub>	483.0786	483.0775	2.31	483.0829, 423.0593, 271.0498, 241.0403, 211.023, 169.0173, 125.0272	di-galloylglucose isomer III	4
22	19.723	C <sub>16</sub> H <sub>18</sub> O <sub>9</sub>	353.0874	353.0873	0.40	353.0924, 191.0596, 179.0386, 173.0487,	Cryptochlorogeni c acid	2

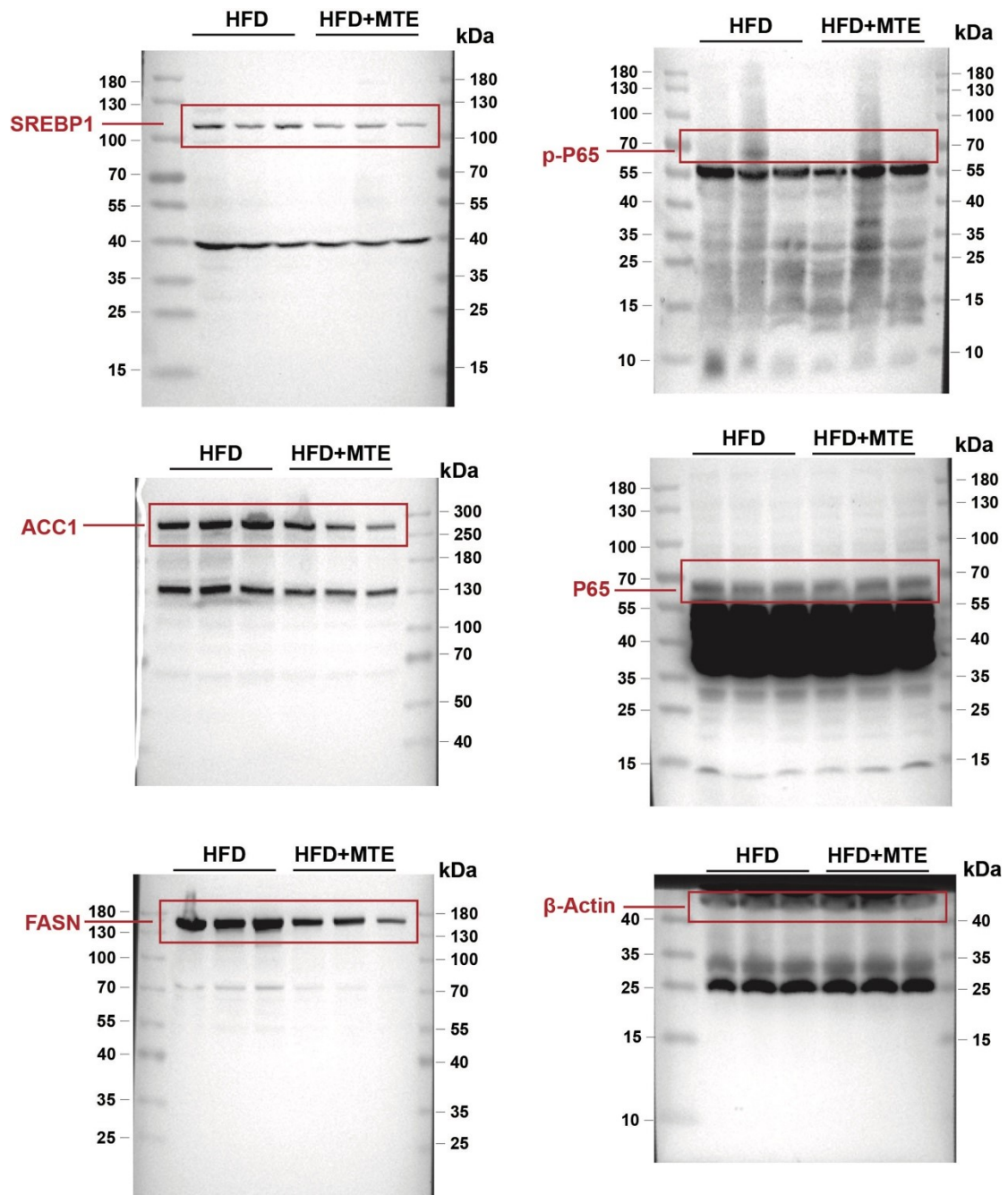
						161.0266, 135.0481, 761.1417, 609.1282,		
23	23.267	C <sub>37</sub> H <sub>30</sub> O <sub>18</sub>	761.1367	761.1354	1.71	591.1175, 423.076, 169.0172, 125.0265	Theasinensin B	7
24	25.563	C <sub>16</sub> H <sub>18</sub> O <sub>8</sub>	337.0925	337.0923	0.46	337.0975, 191.0595, 163.0439, 119.0531	cis-4-p-CoQA	8
25	26.259	C <sub>15</sub> H <sub>12</sub> O <sub>8</sub>	319.0458	319.0454	1.27	319.0508, 191.0390, 177.027, 137.0265, 125.0275,	trans- 3,3',4',5,5',7- hexahydroxyflav anone	1
26	26.7	C <sub>15</sub> H <sub>14</sub> O <sub>6</sub>	289.0711	289.0712	-0.40	289.0761, 245.0864, 125.0276, 123.048, 109.0323, 97.0321	Epicatechin	2
27	27.396	C <sub>16</sub> H <sub>18</sub> O <sub>8</sub>	337.0925	337.0923	0.46	337.0975, 191.0595, 163.0439, 119.0531	trans-4-p-CoQA	8
28	28.169	C <sub>22</sub> H <sub>18</sub> O <sub>11</sub>	457.0785	457.0771	3.08	457.0835, 305.0723, 170.0213, 161.0287, 169.0179, 125.0274	Epigallocatechin gallate	2
29	28.423	C <sub>27</sub> H <sub>24</sub> O <sub>18</sub>	635.0901	635.0884	2.61	635.0951, 465.0735, 313.0608, 169.0176	1,4,6-tri-O- galloyl-beta-d- glucopyranose	1
30	33.081	C <sub>22</sub> H <sub>18</sub> O <sub>11</sub>	457.0785	457.0771	3.08	457.0835, 305.0723, 170.0213, 161.0287, 169.0179, 125.0274	Gallocatechin gallate	2
31	35.797	C <sub>23</sub> H <sub>22</sub> O <sub>13</sub>	505.0982	505.0982	-0.04	505.1032, 353.0921, 173.09494, 135.0476	3-C,5-GQA	5
32	36.349	C <sub>44</sub> H <sub>34</sub> O <sub>21</sub>	897.1509	897.1514	-0.60	897.1559, 727.1405, 407.0822, 423.0778, 169.0164, 125.0253,	Theasinensin F	1
33	37.575	C <sub>21</sub> H <sub>20</sub> O <sub>13</sub>	479.0828	479.0826	0.48	479.0878, 316.0266, 271.0297	Myricetin-3'- glucoside	1
34	37.685	C <sub>27</sub> H <sub>30</sub> O <sub>17</sub>	625.1405	625.1405	0.03	625.1455, 316.0263, 271.0293, 178.9861	Quercetin O- hex, O-hex	2
35	38.657	C <sub>23</sub> H <sub>22</sub> O <sub>13</sub>	505.0982	505.0982	-0.04	505.1032, 353.0921, 173.09494, 135.0476	4-C,5-GQA	5
36	40.843	C <sub>44</sub> H <sub>34</sub> O <sub>21</sub>	897.1509	897.1514	-0.60	897.1559, 727.1405, 407.0822, 423.0778, 169.0164, 125.0253,	Epigallocatechin 3-O-gallate- (4beta → 6) – epicatechin 3-O- gallate	1
37	41.229	C <sub>27</sub> H <sub>30</sub> O <sub>16</sub>	609.147	609.1456	2.36	609.152, 301.0389, 300.0313, 271.0264, 255.0348, 151.0072	Rutin	2
38	41.273	C <sub>14</sub> H <sub>6</sub> O <sub>8</sub>	300.9987	300.9984	0.85	301.0037, 229.9916,	Ellagic acid	2

						117.0374, 145.0328		
39	42.51	C <sub>22</sub> H <sub>18</sub> O <sub>10</sub>	441.0832	441.0822	2.32	441.0882, 289.0863, 169.0170, 125.0275	Epicatechin gallate	2
40	42.808	C <sub>23</sub> H <sub>22</sub> O <sub>12</sub>	489.1035	489.1033	0.40	489.1085, 337.0976, 173.0492, 137.0267	G, p-CoQA	2
41	42.973	C <sub>29</sub> H <sub>22</sub> O <sub>15</sub>	609.0887	609.0881	1.07	609.0937, 161.0280, 125.0276, 169.0178	(-) Epigallocatechin- 3,5-di-O-gallate	9
42	43.525	C <sub>29</sub> H <sub>22</sub> O <sub>15</sub>	609.0887	609.0881	1.07	609.0937, 161.0280, 125.0276, 169.0178	Gallocatechin- 3,5-di-O-gallate	9
43	44.221	C <sub>33</sub> H <sub>40</sub> O <sub>19</sub>	739.2105	739.2086	2.62	739.2155, 286.0489, 285.0457, 284.0373	Kaempferol- rhamnosyl- rutinoside	10
44	45.027	C <sub>27</sub> H <sub>30</sub> O <sub>15</sub>	593.1512	593.1507	0.93	593.1562, 285.0457, 255.0346	Kaempferol-3-O- rutinoside	2
45	45.082	C <sub>21</sub> H <sub>20</sub> O <sub>11</sub>	447.0935	447.0927	1.70	447.0985, 284.0372, 255.0344, 227.0391	Kaempferol-3-O- galactoside	11
46	46.65	C <sub>44</sub> H <sub>34</sub> O <sub>21</sub>	897.1509	897.1514	-0.60	897.1559, 727.1405, 407.0822, 423.0778, 169.0164, 125.0253,	Epicatechin 3-O- gallate-(4beta- >6)- epigallocatechin 3-O-gallate	1
47	46.826	C <sub>21</sub> H <sub>20</sub> O <sub>11</sub>	447.0935	447.0927	1.70	447.0985, 284.0372, 255.0344, 227.0391	Kaempferol-3-O- glucoside	1
48	47.732	C <sub>24</sub> H <sub>20</sub> O <sub>9</sub>	451.1039	451.1029	2.19	451.1089, 287.0576, 161.0277	(Epi)gallocatechi n 3-O-p- coumaroate isomer I	12
49	48.118	C <sub>24</sub> H <sub>20</sub> O <sub>9</sub>	451.1039	451.1029	2.19	451.1089, 287.0576, 161.0277	(Epi)gallocatechi n 3-O-p- coumaroate isomer II	12
50	50.723	C <sub>15</sub> H <sub>10</sub> O <sub>8</sub>	317.0301	317.0297	1.12	317.0351, 271.0286, 151.0066, 137.0235, 107.0161	Myricetin	2
51	50.9	C <sub>29</sub> H <sub>22</sub> O <sub>14</sub>	593.0942	593.0931	1.80	593.0992, 423.0788, 271.0654, 169.0170, 125.0268,	(-)-Epicatechin 3,5-di-O-gallate	9
52	52.269	C <sub>24</sub> H <sub>20</sub> O <sub>9</sub>	451.1039	451.1029	2.19	451.1089, 287.0576, 161.0277	(Epi)catechin 3- O-caffeoate	12
53	52.501	C <sub>15</sub> H <sub>10</sub> O <sub>7</sub>	301.0344	301.0348	-1.43	301.0394, 191.0386, 149.0283	Quercetin isomer	1
54	52.501	C <sub>15</sub> H <sub>10</sub> O <sub>7</sub>	301.0344	301.0348	-1.43	301.0394, 191.0386, 149.0283	Quercetin	2

55	55.349	C <sub>36</sub> H <sub>28</sub> O <sub>16</sub>	715.1307	715.1299	1.10	715.1357, 563.129, 545.1122, 169.0170, 125.0275	Theaflavin-3- gallate	2
56	55.912	C <sub>27</sub> H <sub>20</sub> O <sub>13</sub>	551.0828	551.0826	0.42	551.0878, 261.0442, 233.0493, 169.0175, 125.0276	Epitheafagallin 3-O-gallate	9, 13

## Supplementary Figures

### Supplementary Figure S1



**Fig. S1.** Uncropped images of western blot for all panels shown in Fig. 7E

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