

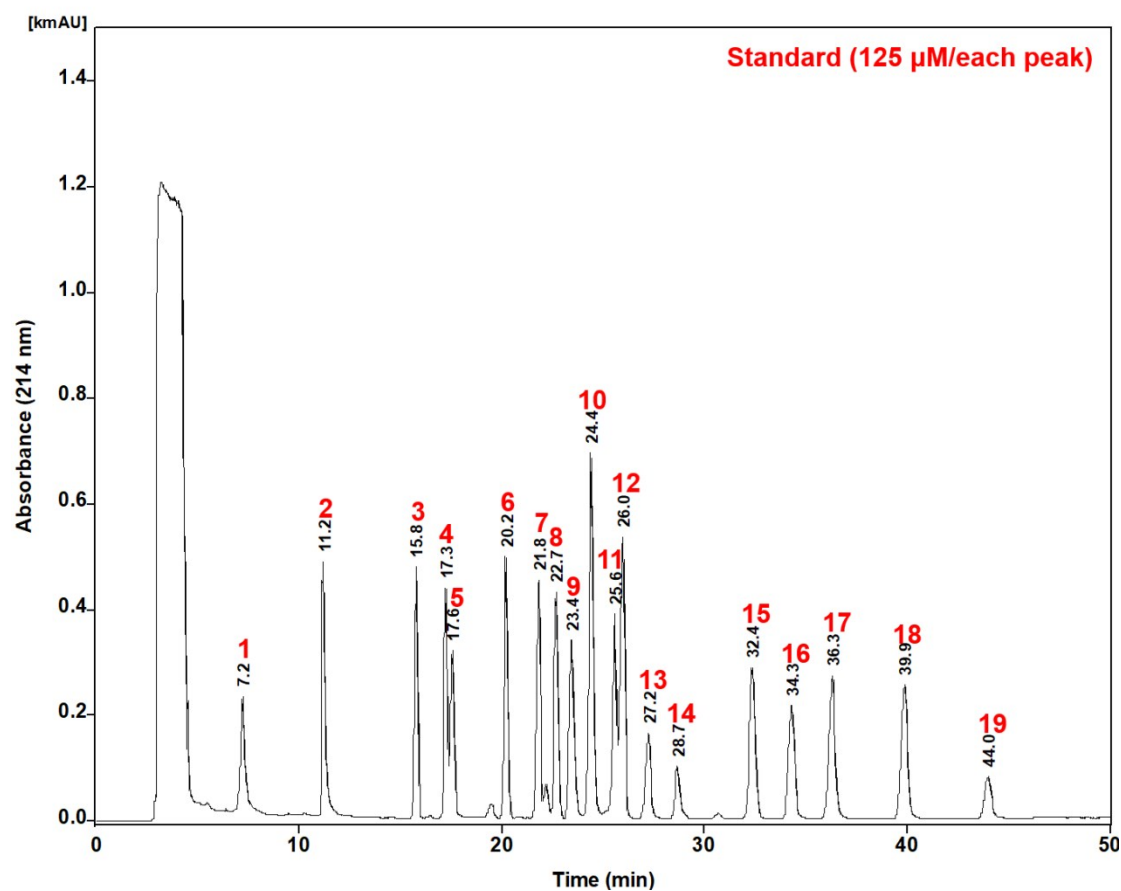
Supplementary information

Supplementary Table 1. Chemical composition of PMF samples

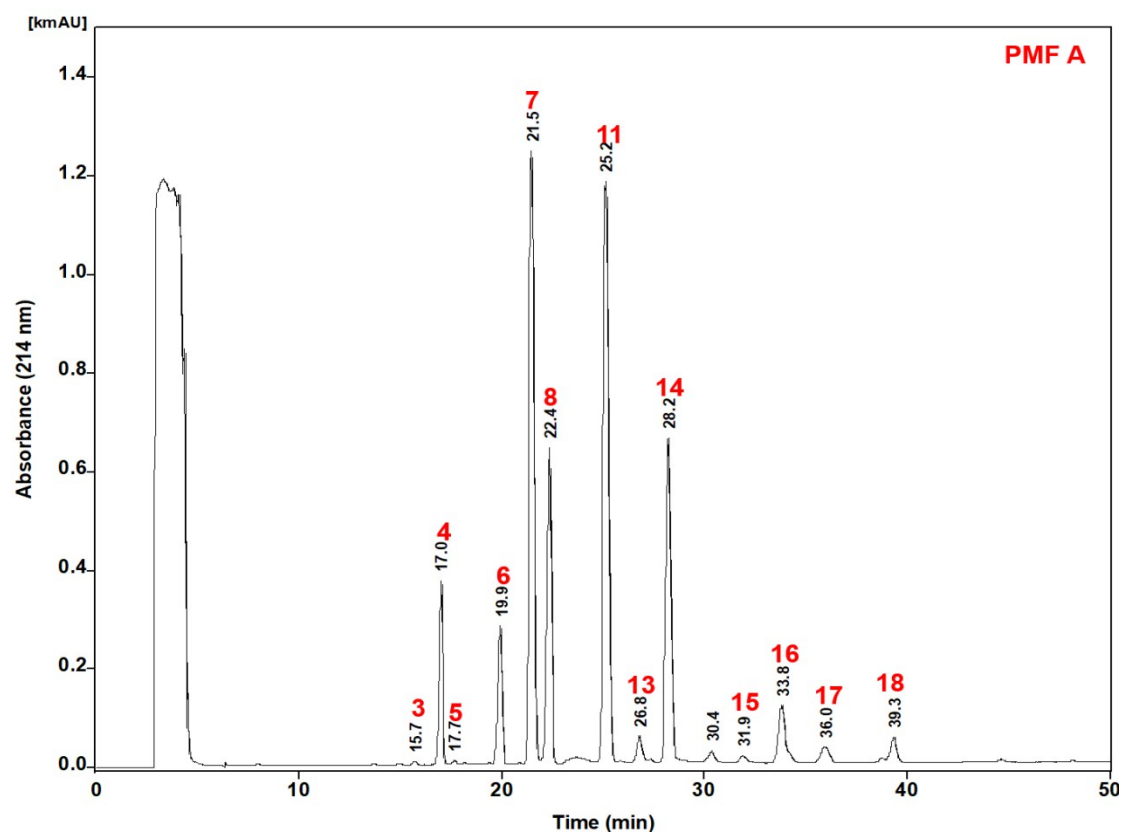
Peak No.	Common name	Chemical names	20% PMFs	24% PMFs	30% PMFs	65% PMFs
1	5-PMF	5,7,3',4',5'-penta-hydroxyflavone	N.D.	N.D.	N.D.	N.D.
2		3-hydroxy-5,6,7,8,3',4'-hexa-methoxyflavone	N.D.	N.D.	N.D.	N.D.
3	4-PMF	5,7,3',4'-tetra-methoxyflavone	0.7 ± 0.1	0.5 ± 0.0	0.9 ± 0.0	1.6 ± 0.1
4	Sinensetin	5,6,7,3',4'-penta-methoxyflavone	25.2 ± 0.0	20.8 ± 0.0	28.7 ± 0.0	79.7 ± 0.0
5	Cirsimaritin	5,4'-dihydroxy-6,7-dimethoxyflavone	0.8 ± 0.0	0.7 ± 0.0	0.9 ± 0.0	3.7 ± 1.3
6		3,5,6,7,3',4'-hexa-methoxyflavone	13.4 ± 0.0	15.8 ± 0.0	19.5 ± 0.0	48.3 ± 0.0
7	Nobiletin	5,6,7,8,3',4'-hexamethoxyflavone	80.4 ± 0.1	98.2 ± 0.0	101.0 ± 0.0	128.0 ± 0.0
8		5,6,7,4'-tetra-methoxyflavone	34.1 ± 0.1	36.8 ± 0.1	40.8 ± 0.1	90.7 ± 0.1
9		5,4'-dihydroxy-6,7,8,3'-tetra-methoxyflavone	N.D.	N.D.	N.D.	N.D.
10	6-Demethoxycirsimaritin	5,4'-dihydroxy-7-methoxyflavone	N.D.	N.D.	N.D.	N.D.
11		3,5,6,7,8,3',4'-hepa-methoxyflavone	63.9 ± 0.4	107.1 ± 0.2	104.8 ± 0.4	122.9 ± 3.9
12	5'-methoxynobiletin	5,6,7,8,3',4',5'-heptamethoxyflavone	N.D.	N.D.	N.D.	N.D.
13	5-Demethylsinensetin	5-hydroxy-6,7,3',4'-tetra-methoxyflavone	13.0 ± 0.8	9.2 ± 0.3	11.0 ± 0.1	47.4 ± 2.5
14	Tangeretin	5,6,7,8,4'-penta-methoxyflavone	84.4 ± 0.1	167.3 ± 1.6	126.4 ± 0.0	238.1 ± 2.1
15		5-hydroxy-3,6,7,3',4'-penta-methoxyflavone	0.8 ± 0.0	1.7 ± 0.7	2.3 ± 2.2	5.0 ± 0.5
16	5-Demethylnobiletin	5-demethyl-6,7,8,3',4'-hexamethoxyflavone	10.7 ± 0.0	16.3 ± 0.1	15.2 ± 0.2	40.8 ± 1.0
17		5-hydroxy-6,7,4'-tri-methoxyflavone	2.8 ± 0.0	3.1 ± 0.1	3.0 ± 0.0	9.3 ± 0.1
18		5-hydroxy-3,6,7,8,3',4'-hexamethoxyflavone	2.1 ± 0.0	5.3 ± 0.1	3.6 ± 0.1	8.6 ± 0.0
19	5-Demethyltangeretin	5-hydroxy-6,7,8,4'-tetra-methoxyflavone	N.D.	N.D.	N.D.	N.D.
		PMFs	302.9 ± 0.1	447.9 ± 1.0	423.0 ± 0.3	714.6 ± 2.3
		HPMFs	29.4 ± 0.8	35.6 ± 1.4	35.1 ± 2.6	111.0 ± 3.1
		Total flavones	332.4 ± 0.7	482.8 ± 3.3	457.9 ± 3.1	824.0 ± 7.8

The values were averages from duplicate samples and were given in mg/g, mean±SE.
N.D.: not detected

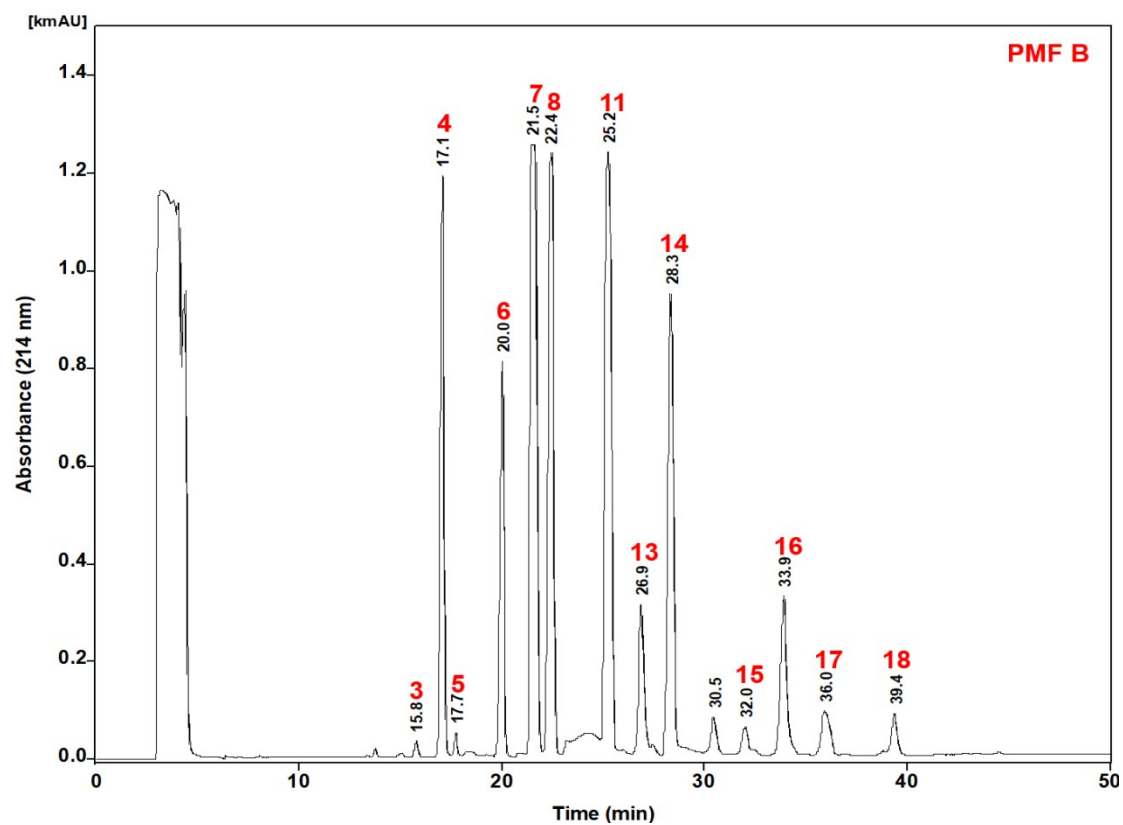
Supplementary Figure 1. HPLC profile of standards

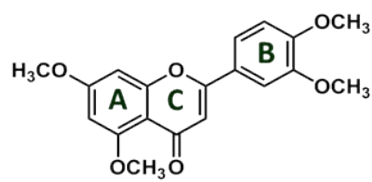


Supplementary Figure 2. HPLC profile of PMF A

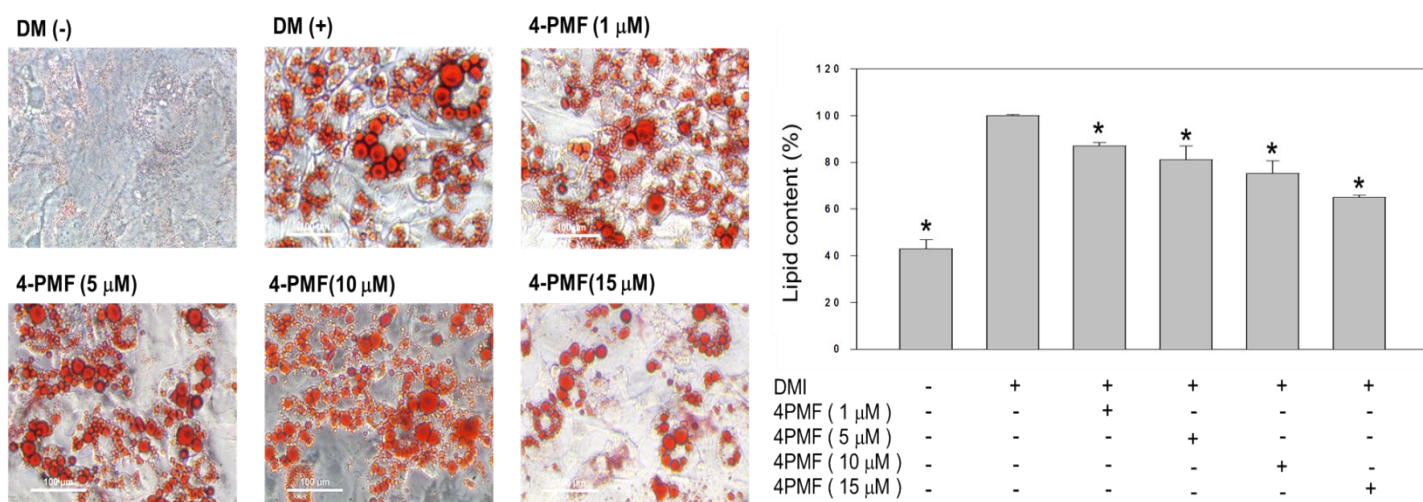


Supplementary Figure 3. HPLC profile of PMF B





4-PMF
5,7,3',4'-tetramethoxyflavone



Supplementary Figure 4. Effects of 4-PMF on 3T3-L1 preadipocyte model. DM (-), without differentiation medium; DM (+), with differentiation medium containing insulin, IBMX, DEX, and rosiglitazone. The cells were photographed under 200× magnification. Statistical evaluate was performed by Student's t test. Data are presented as the means ± SE for the indicated number of independently performed experiments. The differences between the DM(-), DM (+)and different concentrations of 4-PMF compounds were analysis by Student's t test. (*) $p < 0.05$, statistically significant differences from DM (+) group.