Supplemental Data

Groups		DPPH Radical Scavenging Activity (%)						O2 [←] Scavenging Activity (%)				
(µg/mg)	10	20	40	80	100	120	10	20	40	80	100	120
<mark>Vc</mark>	<mark>65.55±</mark>	<mark>76.82±</mark>	<mark>80.97±</mark>	<mark>80.60±</mark>	<mark>80.76±</mark>	<mark>80.11±</mark>	<mark>52.69±</mark>	<mark>79.05 ±</mark>	<mark>82.06±</mark>	<mark>82.81 ±</mark>	<mark>81.68±</mark>	<mark>81.49±</mark>
	<mark>2.12</mark>	<mark>1.85</mark>	<mark>1.94</mark>	<mark>1.46</mark>	<mark>1.42</mark>	<mark>1.22</mark>	<mark>3.14</mark>	<mark>2.05</mark>	<mark>2.13</mark>	<mark>2.02</mark>	<mark>0.73</mark>	<mark>0.74</mark>
<mark>FMF</mark>	<mark>41.42±</mark>	<mark>66.98±</mark>	<mark>76.79±</mark>	<mark>77.08±</mark>	<mark>77.74 ±</mark>	<mark>78.44±</mark>	<mark>31.45 ±</mark>	<mark>56.80±</mark>	<mark>75.18±</mark>	<mark>78.14±</mark>	<mark>77.49±</mark>	<mark>76.96±</mark>
	<mark>2.33^{***}</mark>	<mark>2.24^{**}</mark>	2.29 ^{ns}	1.71 ^{ns}	1.25 ^{ns}	0.54 ^{ns}	1.39 ^{***}	<mark>2.70^{***}</mark>	<mark>2.40[*]</mark>	1.12 [*]	<mark>2.09*</mark>	<mark>1.79[*]</mark>
<mark>FME</mark>	<mark>10.87±</mark>	<mark>23.85 ±</mark>	<mark>46.06±</mark>	<mark>62.65 ±</mark>	<mark>70.37 ±</mark>	<mark>70.35 ±</mark>	<mark>27.78±</mark>	<mark>49.63±</mark>	<mark>65.37 ±</mark>	<mark>68.43 ±</mark>	<mark>70.48±</mark>	<mark>69.95 ±</mark>
	<mark>2.46^{###}</mark>	<mark>2.40^{###}</mark>	<mark>3.09^{###}</mark>	<mark>2.97^{##}</mark>	<mark>0.94^{##}</mark>	1.21 ^{##}	3.07 ^{ns}	<mark>2.90[#]</mark>	<mark>3.22[#]</mark>	<mark>3.31^{##}</mark>	1.26 ^{##}	1.04 ^{##}
<mark>FMW</mark>	<mark>1.50 ±</mark>	<mark>2.94 ±</mark>	<mark>3.97 ±</mark>	<mark>5.57 ±</mark>	<mark>11.01 ±</mark>	<mark>11.66±</mark>	<mark>27.02 ±</mark>	<mark>47.12±</mark>	<mark>60.97 ±</mark>	<mark>63.31 ±</mark>	<mark>65.60±</mark>	<mark>66.98±</mark>
	0.27 ^{***}	0.29 ^{×××}	0.83 ^{×××}	1.61 ^{×××}	0.80 ^{×××}	0.57 ^{×××}	3.86 ^{ns}	1.88 ^{××}	<mark>2.63^{××}</mark>	2.87 ^{××}	<mark>2.90^{××}</mark>	1.54 ^{**}
Results are shown as mean \pm SD (n=3). ns, not significant, *** p < 0.001, ** p < 0.01, * p < 0.05												
	compared with Va group: $^{\#\#}$ n < 0.001 $^{\#}$ n < 0.01 $^{\#}$ n < 0.05 compared with EME group: XXX n <											

 TABLE S1. In vitro antioxidant activities of different extracts from Folium Microcos.

0.001, xx p < 0.01 compared with FMF group.



400 µM H₂O₂

FIGURE S1: Effects of FMF on morphological changes induced by H_2O_2 in HepG2 cells. Cells were treated with FMF (10, 20, 40, 80, 100, and 200 µg/mL) in the presence of 400 µM H_2O_2 for 4 h and observed by microscope. (a) Control cells. (b) Cells exposed to H_2O_2 . (c-h) Cells pretreated with different doses of FMF and then exposed to H_2O_2 .



FIGURE S2: Effects of FMF on H₂O₂-mediated oxidative stress in Hepa1-6 cells. Cells were treated with FMF (10, 20, 40, 80, 100, and 200 µg/mL) in the presence of 400 µM H₂O₂ for 4 h. (a) ROS formation was measured using a fluorescence microplate reader. (b) Cellular mortality was evaluated by MTT assay. Results are shown as mean \pm SD (n=3). *** P < 0.001 compared with the control group; ### p < 0.001, ## p < 0.01, # p < 0.05 compared with H₂O₂-intoxicated group.



FIGURE S3: Effects of FMF on morphological changes induced by H_2O_2 in Hepa1-6 cells. Cells were treated with FMF (10, 20, 40, 80, 100, and 200 µg/mL) in the presence of 400 µM H_2O_2 for 4 h and observed by microscope. (a) Control cells. (b) Cells exposed to H_2O_2 . (c-h) Cells

pretreated with different doses of FMF and then exposed to H₂O₂.



FIGURE S4: Cytotoxicity assay. (a) HepG2 and (b) Hepa1-6 cells were treated with FMF (10, 20, 40, 80, 100, and 200 μ g/mL) for 24 h, and cellular mortality was evaluated by MTT assay. Results are shown as mean \pm SD (n=3).



FIGURE S5: Effects of FMF on Nrf2 nuclear translocation and its target gene expression.
Hepa1-6 cells were treated with FMF (100 μg/mL) for 12 and 24 h. (a) Nuclear and cytoplasmic
extracts of cells were prepared, and the protein level of Nrf2 was determined by western blot.
Lamin B and Tubulin were used as endogenous controls for nucleus and cytoplasm, respectively.
(b)Total cellular protein was extracted, and protein levels of Nrf2, NQO1 and HO-1 were
determined by western blot. GAPDH was used as an endogenous control. Relative intensity of the





FIGURE S6: RP-HPLC profiles of (a) flavonoid standards and (b) flavonoid compounds in

FMF at 360 nm. Peaks: 1, vitexin; 2, isovitexin; 3, isorhamnetin-3-O-β-D-glucoside; 4, narcissin.

TABLE S2: Calibration curves and contents of the polyphenolic compounds in FMF from *Folium Microcos*.

No	phenolic compound	content (µg/mg)	t _R (min)	equation of regression (Y = aX + b)	\mathbb{R}^2
1	vitexin	10.37	21.27 ± 0.25	Y = 1744.0X + 16.472	0.9997
2	isovitexin	10.56	24.60 ±0.21	Y = 3302.9X - 17.259	0.9995
3	isorhamnetin-3-O-β -D-glucoside	11.30	$45.30{\pm}0.26$	Y = 3038.2X + 39.04	0.9994
4	narcissin	62.38	47.21 ±0.32	Y = 1963.9X + 7.5613	0.9993