

**Supplemental Figure 1.** Effects of 5-hydroxy-3,6,7,8,3',4'-hexamethoxyflavone (5-OH-HxMF) and 3,5,6,7,8,3',4'-heptamethoxyflavone (HpMF) on the cell viabilities of THP-1-derived macrophages and HepG2 cells. (A) THP-1-derived macrophages were treated with the indicated concentration of agent for 48 h and cell viability was analyzed by MTT as described in Materials and Methods. (B) HepG2 cells were cultured in 6-well plates until 80% confluent, and then changed to LPDS-containing medium for overnight. Cells were then treated with the indicated compound or control vehicle (0.1% v/v DMSO) for 48 h and cell viability was analyzed by MTT as described in Materials and Cell viability was analyzed by MTT as



**Supplemental Figure 2.** Effects of 5-hydroxy-3,6,7,8,3',4'-hexamethoxyflavone (5-OH-HxMF) and 3,5,6,7,8,3',4'-heptamethoxyflavone (HpMF) on the expression of DGAT2 in HepG2 cells. HepG2 cells were cultured in 6-well plates until 80% confluent, and then changed to LPDS-containing medium for overnight. Cells were then treated with the indicated compound or control vehicle (0.1% v/v DMSO) for 24 h. Total cellular RNA was prepared and the expression of DGAT2 was analyzed, as described in the Materials and methods section. Data represent the mean  $\pm$  SD of three independent experiments relative to the value of vehicle control. \**p*<0.05 and\*\**p*<0.01 represent significant differences compared with the vehicle control.

**Supplemental Table 1**. Effects of nobiletin (NOB), 5-demethylnobiletin (5-demethyl NOB), 3',4'-didemethylnobiletin (DTF), 5-hydroxy-3,6,7,8,3',4'- hexamethoxyflavone (5-OH-HxMF) and 3,5,6,7,8,3',4'-heptamethoxyflavone (HpMF) on DiI-oxLDL uptake activity and mRNA expression of CD36 and SR-A in THP-1-derived macrophages <sup>a</sup>.

| <b>Citrus PMF</b> | DiI-oxLDL            | oxLDL-induced         | oxLDL-induced        |
|-------------------|----------------------|-----------------------|----------------------|
|                   | uptake (%)           | CD36 (%) <sup>a</sup> | SR-A (%)             |
| NOB               |                      |                       |                      |
| 10 µM             | $93.3\pm10.2^{1}$    | N/A                   | N/A                  |
| 20 µM             | $61.8 \pm 2.3^{**1}$ | N/A                   | N/A                  |
| 5-demethyl NOB    |                      |                       |                      |
| 10 µM             | $74.4 \pm 1.2^{**2}$ | $42.6\pm 0.4^{**2}$   | $60.5\pm 2.4^{**2}$  |
| 20 µM             | $62.7\pm 0.9^{**2}$  | $53.4 \pm 9.2^{**2}$  | $70.2 \pm 9.3^{**2}$ |
| DTF               |                      |                       |                      |
| 10 µM             | $61.8 \pm 2.2^{**1}$ | N/A                   | N/A                  |
| 20 µM             | $36.9 \pm 1.5^{**1}$ | $61.2\pm5.7^{*}$      | $38.4\pm7.9^{*}$     |
| 5-OH-HxMF         |                      |                       |                      |
| 10 µM             | $67.4\pm7.5^{*}$     | $82.2\pm3.5^*$        | $87.3 \pm 3.4^{*}$   |
| 20 µM             | $60.1{\pm}~6.1^*$    | $82.1\pm3.0^{*}$      | $89.4 \pm 4.1^{*}$   |
| HpMF              |                      |                       |                      |
| 10 µM             | $74.6\pm9.4^{*}$     | $85.6\pm5.2^*$        | $81.3\pm20.2$        |
| 20 µM             | $70.5\pm3.2^*$       | $88.8\pm5.8^*$        | $98.2\pm9.0$         |

<sup>a</sup>Data (mean  $\pm$  SD) are expressed as percentage of the vehicle control (n=3). \*, *p*<0.05 and \*\*, *p*<0.01 represent significant differences compared with the vehicle control in the presence of oxLDL.

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