Supplementary Data

Article

Fisetin inhibits UVA-induced expression of MMP-1 and MMP-3 through the NOX/ROS/MAPK pathway in human dermal fibroblasts and human epidermal keratinocytes

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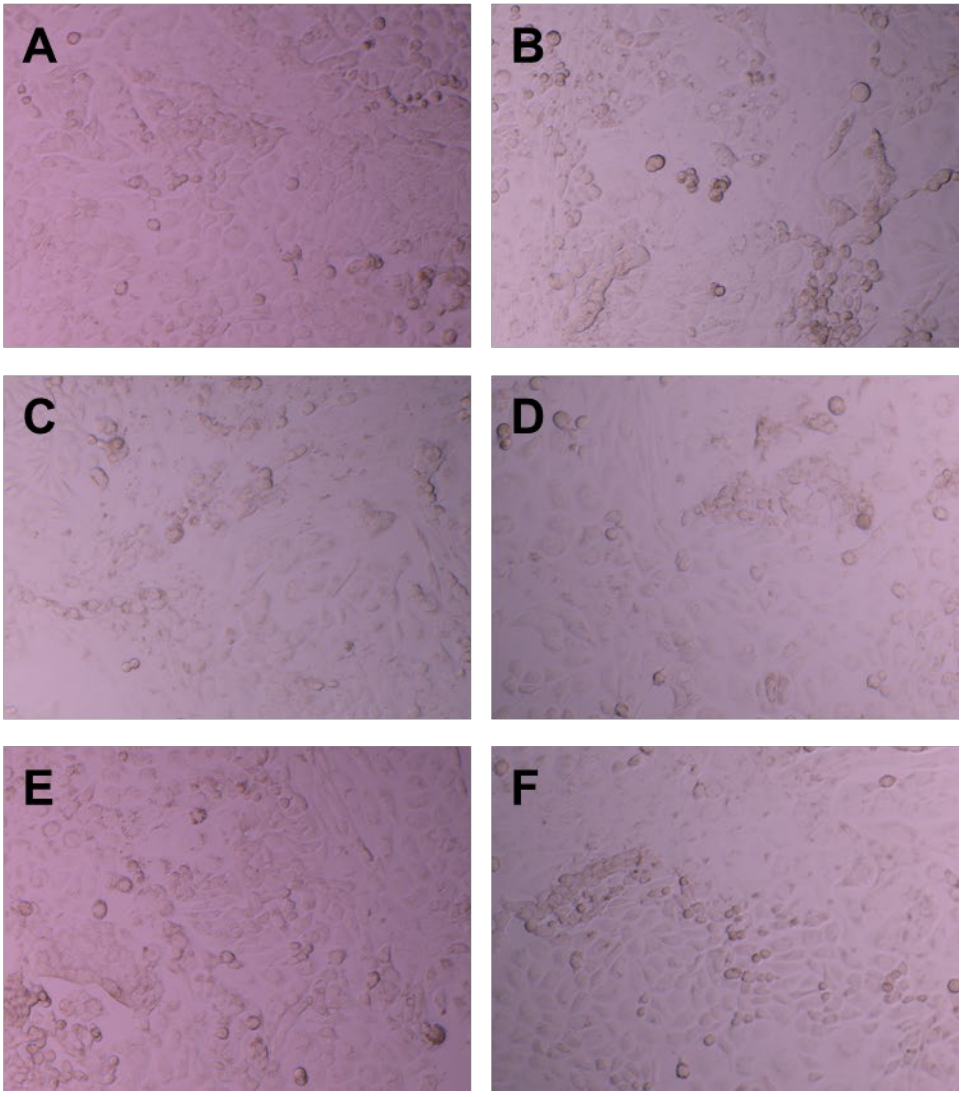
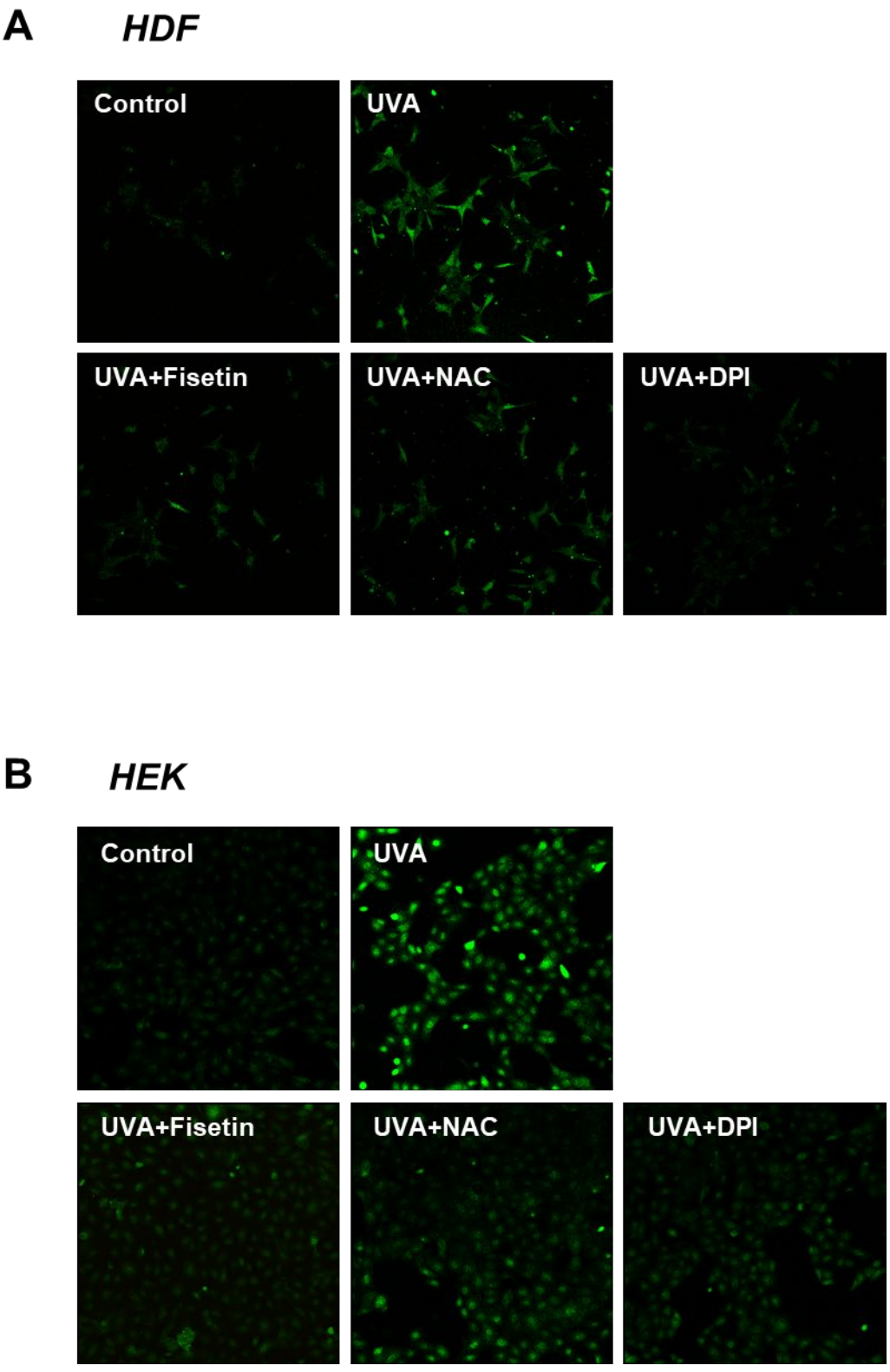
Supplementary Figure 1



Supplementary Figure S1. Effects of fisetin on HEK viability. Cells were treated with fisetin at various concentrations and cytotoxicity was evaluated after 24 h. After pretreatment with fisetin, cells were irradiated with UVA and incubated for 24 h. Morphological changes of HEK under repetitive doses of UVA. HEK were cultured in a 96-well plate until 80% confluent, and then irradiated with repetitive doses of UVA present or absent fisetin. Following UVA irradiation, HEK and fisetin dose-dependent morphologic changes were observed under a EVOS M5000 Imaging System (Invitrogen, WA, USA). (A) Normal, (B) UVA, (C) UVA + 2.5 μM fisetin, (D) UVA + 5 μM fisetin, (E) UVA + 10 μM fisetin and (F) UVA + 20 μM fisetin. HEK : human epithelial keratinocytes; UVA : ultraviolet A.

Supplementary Figure 2



Supplementary Figure S2. Fisetin decreases UVA-induced ROS production in (A) HDF and (B) HEK. Six groups of HDF and HEK were incubated in individual 35 mm dish with conditioned medium, 10 μM fisetin, 10 mM NAC, 5 μM DPI, respectively. These groups were irradiated with 8 J/cm² (for of HDF) and 5 J/cm² UVA (for HEK). DCFDA reacted and immediately observed fluorescence images by confocal microscopy (Nikon, TE-2000, Tokyo, Japan) with excitation / emission at 485 nm / 535 nm. HDF : human dermal fibroblast; HEK : human epithelial keratinocytes; UVA : ultraviolet A.