

Supplementary Information

Puerarin induces mouse mesenteric vasodilation and ameliorates hypertension involving endothelial TRPV4 channels

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This Supplementary Information Includes:

Supplementary materials and methods

Supplementary Figures

Supplementary Figure Legends

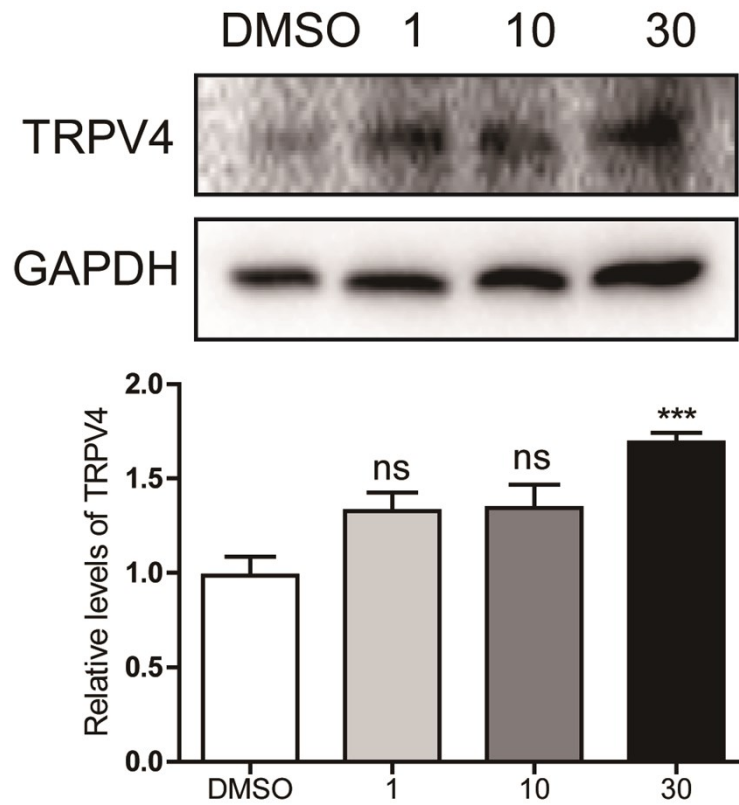
Supplementary materials and methods

Immunocytochemistry assay

The cultured cells were rinsed with 3 times in PBS and fixed with 4% paraformaldehyde for 30 min, then blocked in 5% fetal bovine serum with 0.2% Triton X-100 in PBS for 60 min at room temperature. Samples were incubated with primary antibodies overnight at 4 °C, rinsed with 3 times in PBS for 5 min, and then incubated with secondary fluorescently-labeled antibody for 1 h at room temperature. Nuclei were counterstained with DAPI. Images were captured on a Leica TCS SP8 confocal microscope.

Supplementary Figures

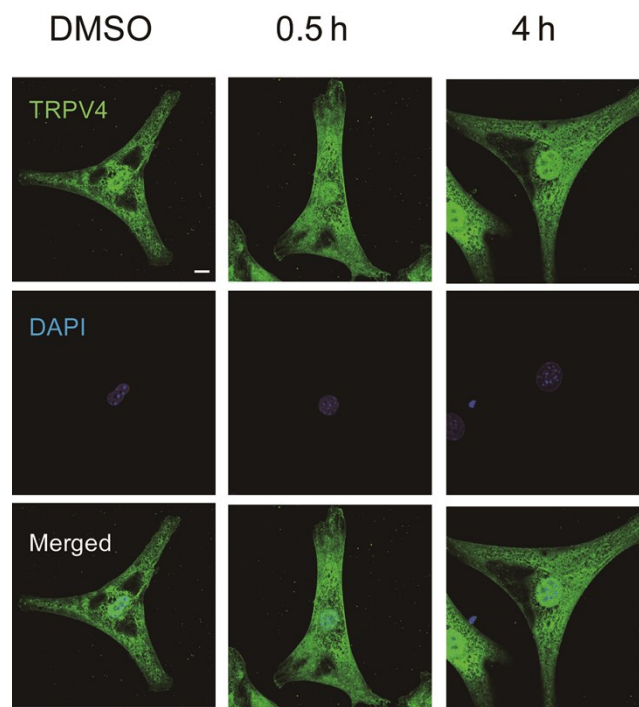
Supplementary Figure 1



Supplementary Figure 1. The effect of Pue on TRPV4 expression in MAECs. MAECs were cultured with Pue (1, 10, 30 μ M) for 12 h, then conducted the western blot assay. ns vs.

DMSO, *** $P < 0.001$ vs. DMSO, One-way ANOVA, $n=3$.

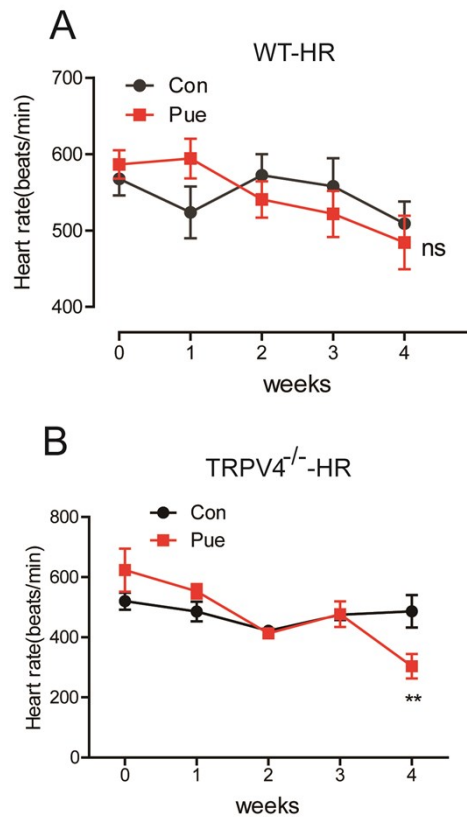
Supplementary Figure 2



Supplementary Figure 2. The effect of Pue on TRPV4-cellular distribution in MAECs. Cells were treated with Pue (30 μ M) for 0.5 or 4 h, then conducted the immunocytochemistry assay.

Scale bar: 10 μ m.

Supplementary Figure 3



Supplementary Figure 3. The effect of Pue on heart rate (HR) in high-salt-induced hypertensive mice. (A-B) HR was detected weekly in Pue-treated high-salt-induced hypertensive wild-type (A) and TRPV4^{-/-} (B) mice. ns vs. Con, ** $P < 0.01$ vs. Con, Two-way ANOVA, $n=6$.

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