Supplementary Information

PIEZO1 and TRPV4, which Are Distinct Mechano-Sensors in the Osteoblastic MC3T3-E1 Cells, Modify Cell-Proliferation

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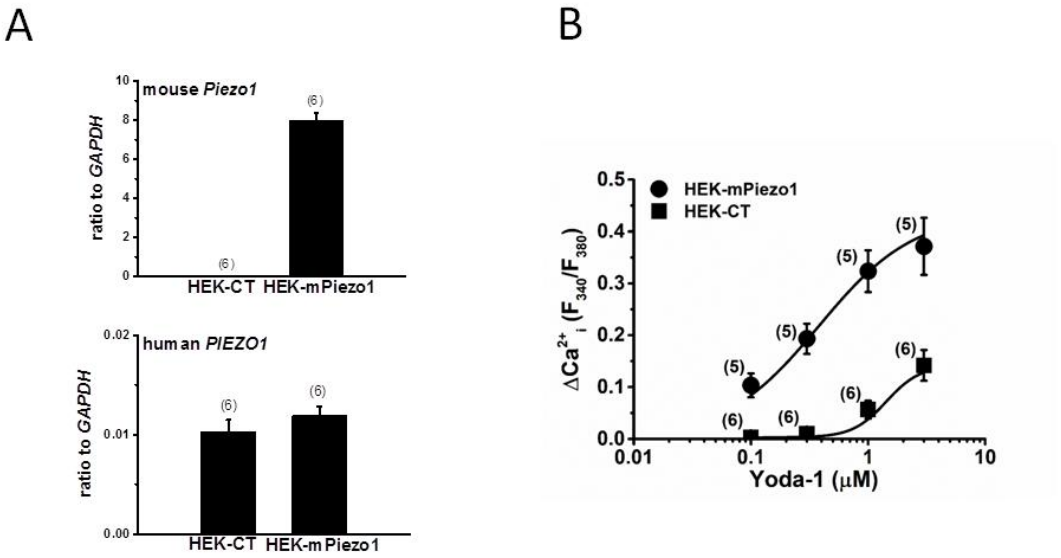

Figure S1. PIEZO channel expression and effects of Yoda1 on HEK-CT and HEK-mPiezo1 cells. (A) The quantitative mRNA expression of mouse *Piezo1* and human *PIEZO1* was determined in HEK-CT and HEK-mPiezo1 cells. (B) To functionally confirm the basal expression of PIEZO1 in HEK-CT cells, Yoda1 applied to HEK-CT cells. The peak change in Ca^{2+} response to Yoda1 ($\Delta Ca^{2+}{}_i$ (F_{340}/F_{380})) was summarized and a set of data was fitted with a concentration-response relationship. The same data sets in Fig.2A were used for HEK-mPiezo1 cells. Pooled data were averaged and expressed as mean ± SEM. The numbers in parentheses indicate the number of independent experiments.

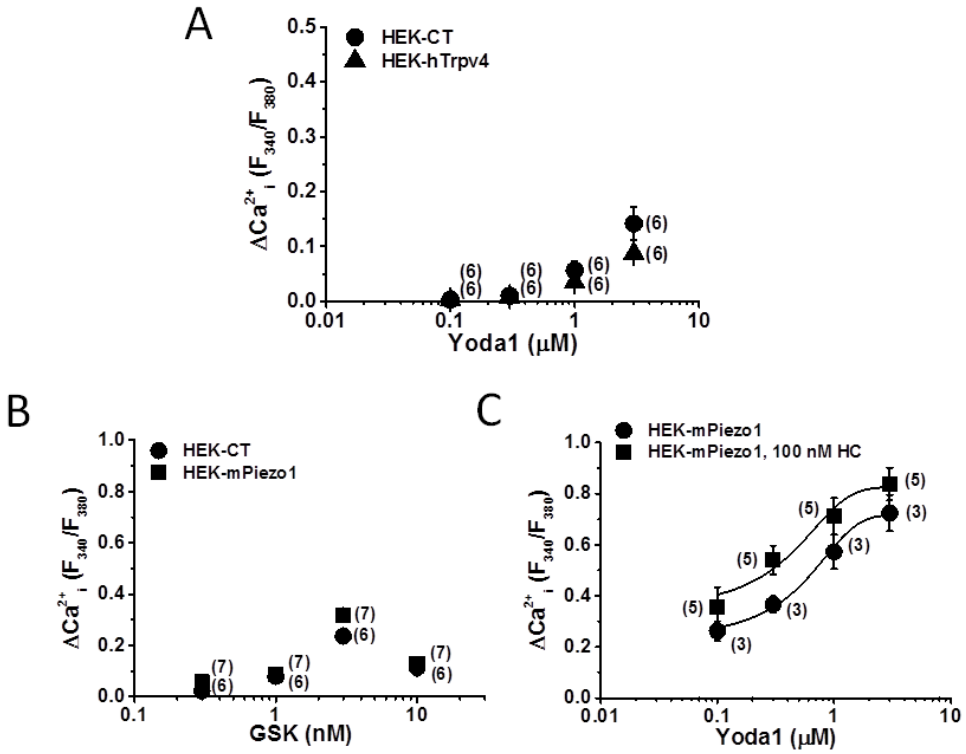

Figure S2. Selectivity of Yoda1, GSK, and HC against TRPV4 (A), PIEZO1 (B), and Yoda1-induced PIEZO1 response (C), respectively, was tested and the peak change in each Ca^{2+} response (ΔCa^{2+}_i (F_{340}/F_{380})) was summarized as a concentration response relationship. A set of data (C) was fitted with a concentration-response relationship. Pooled data were averaged and expressed as mean ± SEM. The numbers in parentheses indicate the number of independent experiments.