Article

Radiofrequency Irradiation Modulates TRPV1-Related Burning Sensation in Rosacea

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Capsaicin treatment model

The F11 cells were treated capsaicin 10μM for 10 minutes [S1] before RF irradiation (2 MHz; 10 Watts; 50, 100, or 150 ms) and culture for 24 hours. After 24 hours, the F11 cells were harvested.

Supplementary figure

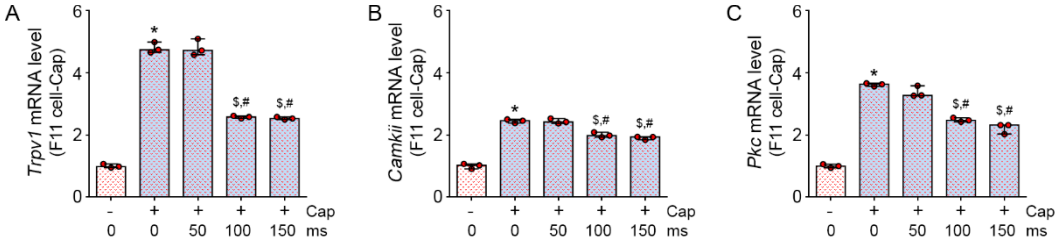

Figure S1. Inhibitory effects of RF on TRPV1 and PKC-dependent pathway in capsaicin-treated sensory neuronal cells. (A-C) Expression of the TRPV1 related PKC-dependent pathway molecule, *Camkii* and *Pkc* mRNA were confirmed by qRT-PCR in capsaicin treated F11 cell model and were normalized to that of *Actb* and expressed relative to the control group. *, $p < 0.05$ vs. Control; $, $P < 0.05$ vs. Capsaicin; #, $P < 0.05$ vs. RF 50ms. Cap, Capsaicin.

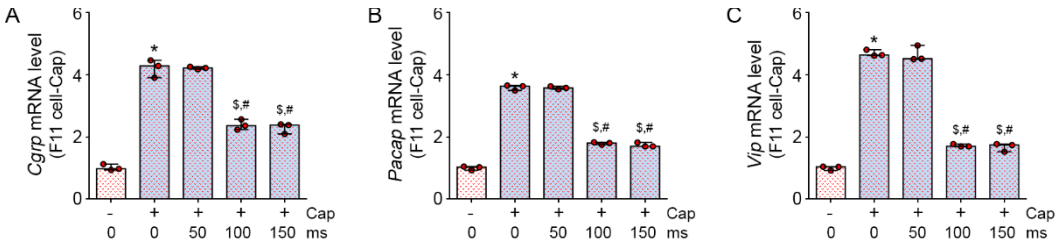

Figure S2. Inhibitory effects of RF on TRPV1-induced neuropeptide expression in capsaicin-treated sensory neuronal cells. (A–C) TRPV1-induced neuropeptide (*Cgrp*, *Pacap* and *Vip*) mRNA expression level was analyzed by qRT-PCR in capsaicin treated F11 cell model and were normalized to that of *Actb* and expressed relative to the control group. *, $p < 0.05$ vs. Control; $, $P < 0.05$ vs. Capsaicin; #, $P < 0.05$ vs. RF 50ms. Cap, Capsaicin.

Supplementary reference

S1 Erine F.; Scott K-G.; Trevor K.; Jeff M.; Aaron D. TRPV1 Agonist, Capsaicin, Induces Axon Outgrowth after Injury via Ca^{2+}/PKA Signaling. *eNeuro* **2018,** *5*, ENEURO.0095-18.