

TITLE

***Polygonum aviculare* L. extract and quercetin attenuate contraction in airway smooth muscle**

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Running title: *Polygonum aviculare* L. extract inhibits ASM precontraction

Supplementary figures

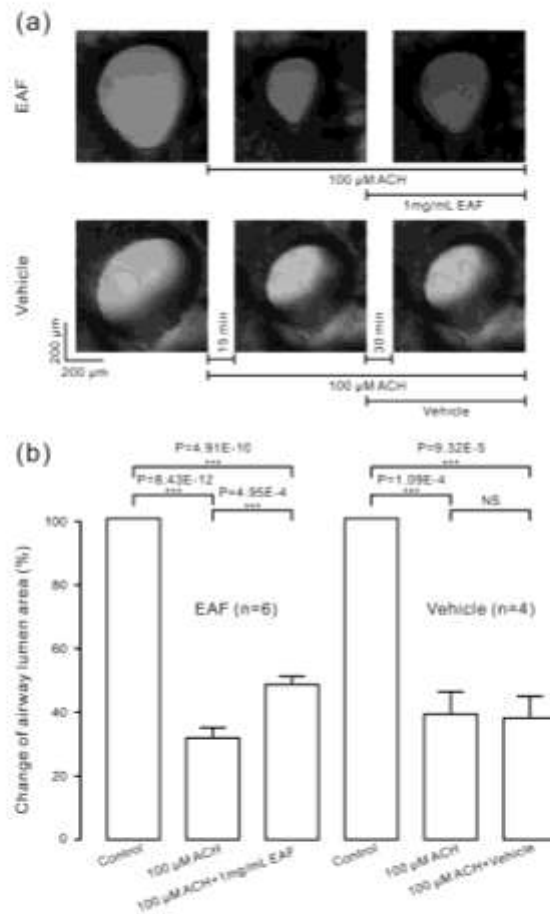


Figure S1. EAF inhibits ACH-induced contraction in mouse bronchial ASM. (a)

The airway lumen area (*left*) in lung slices decreased following the addition of ACH (*middle*), which was markedly reversed by EAF (*right/top*) but not by the vehicle (*right/bottom*). **(b)** The summary of results evaluated using a one-way ANOVA with

selected post hoc comparisons. NS: $P > 0.05$; ***: $P < 0.001$.

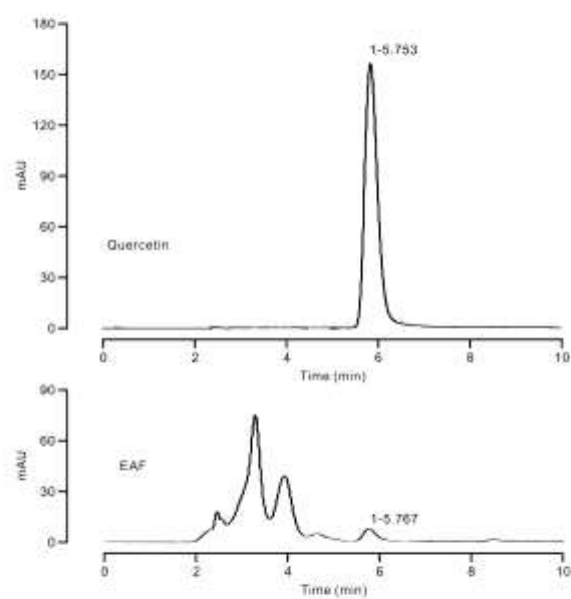


Figure S2. EAF contains quercetin. EAF and the quercetin standard were fractionated via HPLC. One of the peaks of EAF overlapped with that of standard quercetin. These results were observed in 5 independent experiments.

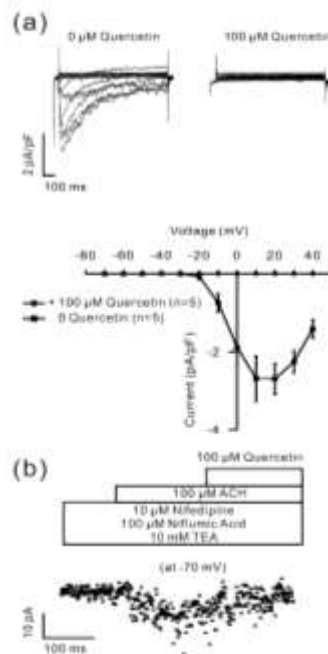


Figure S3. Quercetin inhibits LVDCC-mediated and ACH-activated currents. (a) LVDCC-mediated currents were recorded as shown in Figure 3b and were blocked by quercetin. Current-voltage curves were constructed. **(b)** ACH-induced NSCC-mediated currents, assessed using three inhibitors and special internal and external solutions, were measured as shown in Figure 4e and found to be abrogated by quercetin. These results indicate that quercetin can inhibit current mediated by LVDCCs and ACH-activated NSCCs.

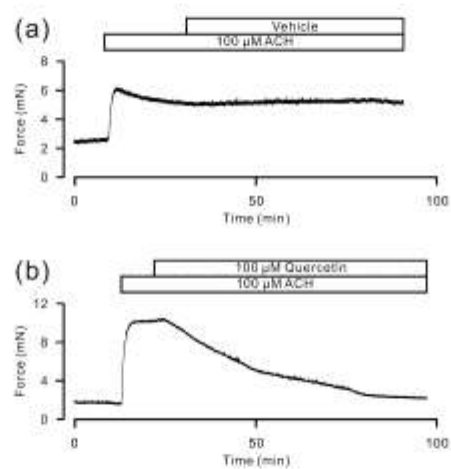


Figure S4. Quercetin inhibits ACh-induced contraction in human bronchial ASM. ACh induced sustained contractions in human bronchial ASM strips, which were inhibited by quercetin but not by the vehicle.