# Biased TAS2R bronchodilators inhibit airway smooth muscle growth by downregulating pERK1/2

Donghwa Kim, Soomin Cho, Maria A. Castaño, Reynold A. Panettieri, Jung A. Woo, and Stephen B. Liggett

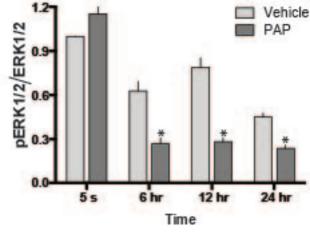
ONLINE DATA SUPPLEMENT

#### **Legends for Supplemental Figures**

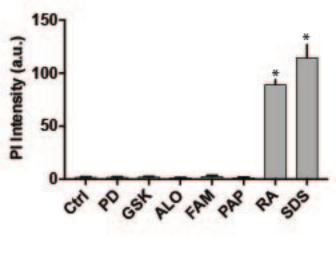
Figure E1. Time course of PAP-mediated activation of pERK1/2. Studies were performed in media containing serum. Results are from 4 independent experiments \*pERK1/2 / ERK1/2 (and % decrease from vehicle) vs. 5 sec time point differs at P < 0.001.

Figure E2. Long term treatment with TAS2R agonists does not cause cell death as determined by propidium iodide staining. Cells were treated in serum-containing media for 48 hrs. The MEK1/2 and ERK1/2 inhibitors (PD and GSK) were included in these studies since these compounds were utilized in other studies of pERK1/2 and cell growth. Positive controls were retinoic acid (RA, 20  $\mu$ M) and SDS (100  $\mu$ M). Results are from 4 experiments. \*, P < 0.001 vs. control (vehicle)

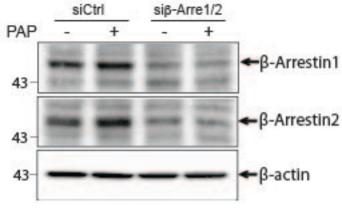
Figure E3. Extent of  $\beta$ -Arrestin protein knock-down with si $\beta$ -arrestin1/2 transfection. Shown is a representative protein immunoblot of HASM cell extracts of 4 experiments performed.



### Figure E1



## Figure E2



#### Figure E3