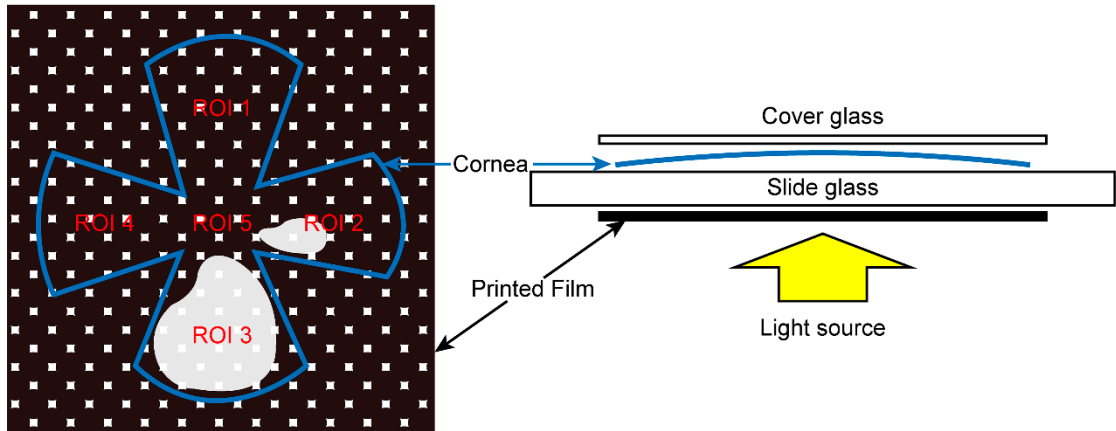
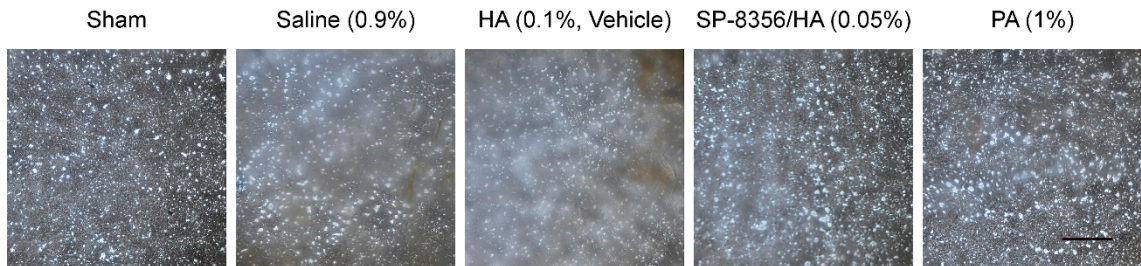


Supplementary Material

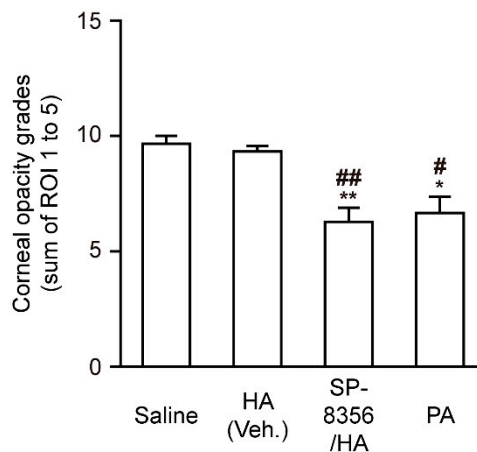
**A**



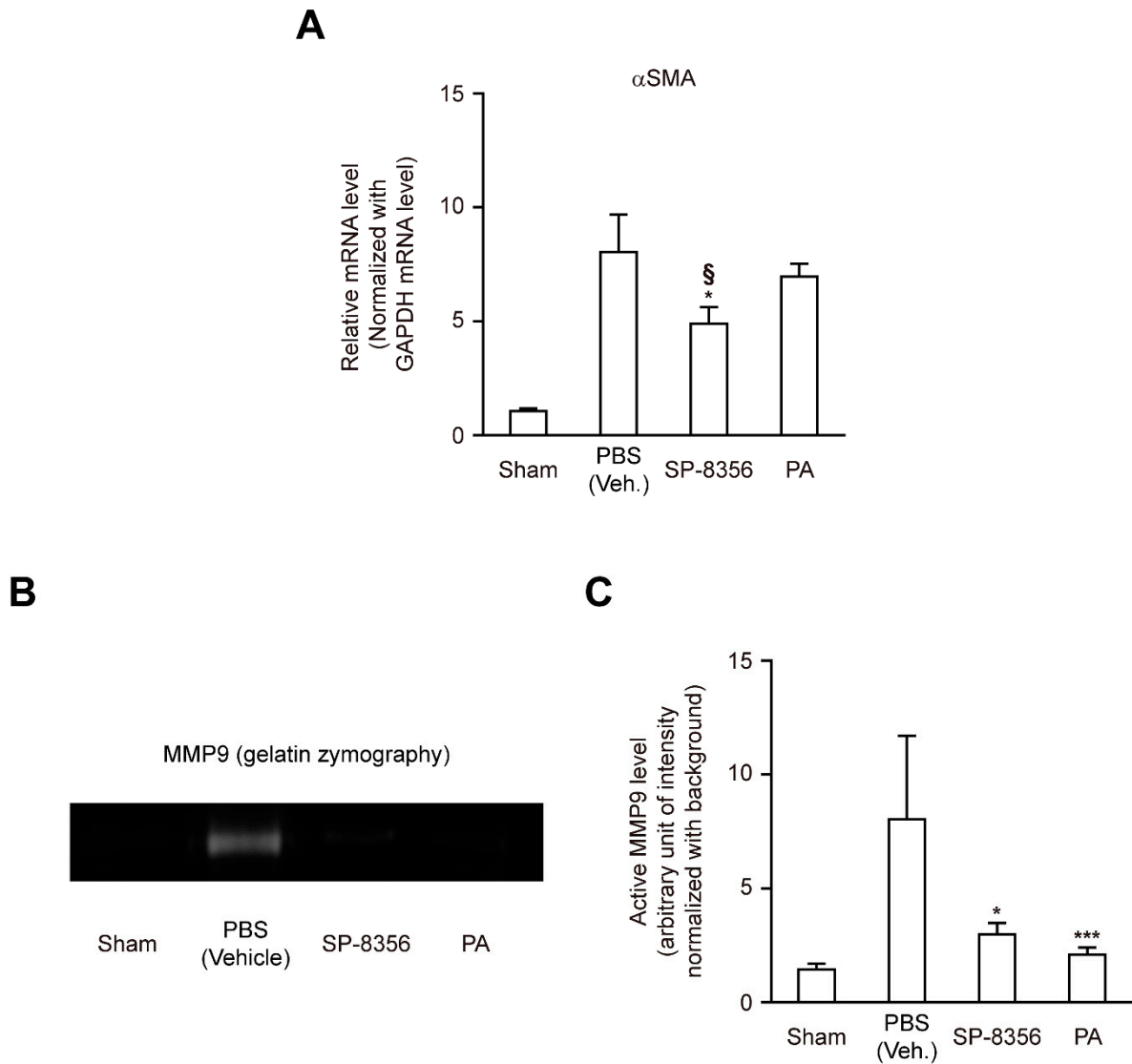
**B**



**C**



**Supplementary Figure S1.** SP-8356 inhibits alkali burn-induced corneal haze at 2-week after alkali burn. **(A)** Schematic diagram for taking representative images of opaque region of flat mounted cornea. **(B)** Representative images of corneal haze were taken at 2 weeks after alkali-burn. The vertically stacked images were taken from the center of cornea (ROI 5). Scale bar, 100  $\mu$ m (magnification, 100 $\times$ ). **(C)** Summation of corneal opacity grade among five ROIs of four CAI groups at 2 weeks after alkali burn ( $n = 6$  for saline,  $n = 9$  for HA,  $n = 14$  for SP-8356/HA,  $n = 9$  for PA). All values are shown as means  $\pm$  SD (\*  $p < 0.05$  vs. saline. \*\*  $p < 0.01$  vs. saline. #  $p < 0.05$  vs. HA. ##  $p < 0.01$  vs. HA).



**Supplementary Figure S2.** SP-8356 suppresses the myofibroblast population and MMP activity at 2-week after alkali burn. (A) Effect of SP-8356 on the relative mRNA level of  $\alpha$ SMA (PBS; 0.2 $\times$  phosphate-buffered saline, SP-8356; 0.933 mM SP-8356 dissolved in 0.2 $\times$  phosphate-buffered saline,  $n = 10$  for sham,  $n = 6$  for PBS,  $n = 8$  for SP-8356,  $n = 9$  for PA). The value of mRNA levels is shown as means  $\pm$  SD (\* $p < 0.05$  vs. PBS. § $p < 0.05$  vs. PA). (B) Representative images of MMP9 gelatin acrylamide gel zymography. (C) Quantitative analysis of the relative level of MMP9 activity in whole corneal lysates ( $n = 10$  for sham,  $n = 7$  for PBS,  $n = 9$  for SP-8356,  $n = 7$  for PA). MMP9 activity values are shown as means  $\pm$  SD (\* $p < 0.05$  vs. PBS. \*\*\* $p < 0.05$  vs. PBS).