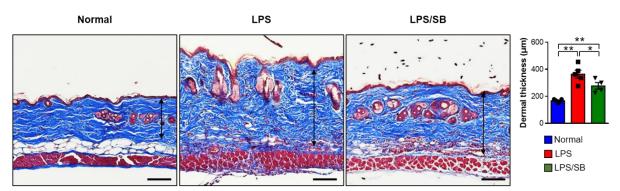
## **Supplementary Materials**

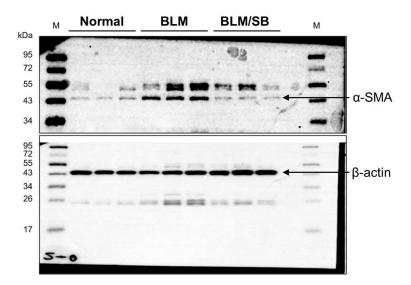
<b>Table S1.</b> Primer sequences f	for quantitativ	e real-time PCR.
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Species	Gene symbol	Direction	Sequence	
Mouse	Ccl2	Reverse	5'- CCAGCCTACTCATTGGGAT -3'	
		Forward	5'- GGGCCTGCTGTTCACAGTT -3'	
Mouse	Gapdh	Reverse	5'- ACCCAGAAGACTGTGGATGG -3'	
		Forward	5'- ACACATTGGGGGTAGGAACA -3'	
Human	IL6	Reverse	5'- CCTCAGACATCTCCAGTCCT -3'	
		Forward	5'- AATGACGACCTAAGCTGCAC -3'	
Human	IL1b	Reverse	5'- TACCTGTCCTGCGTGTTGAA -3'	
		Forward	5'- TCTTTGGGTAATTTTGGGATCT -3'	
Human	GAPDH	Reverse	5'- AGTCAGCCGCATCTTCTTTT -3'	
		Forward	5'- CCAATACGACCAAATCCGTT -3'	

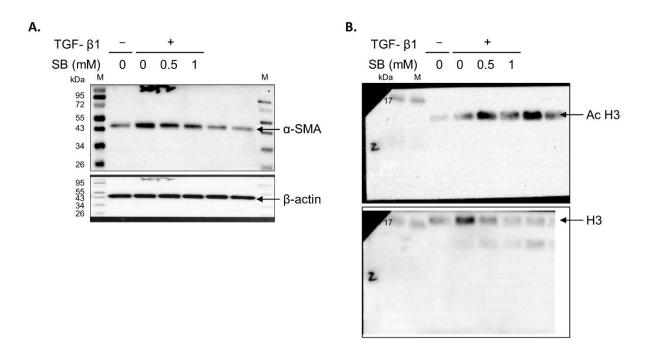


**Figure S1.** Antifibrotic effect of butyrate in LPS-induced skin fibrosis mouse model. Lipopolysaccharide (LPS) was injected subcutaneously on the back skin of mice five times a week for two weeks (5  $\mu$ g/mouse). SB was orally gavaged from two weeks before LPS injection. Skin tissues were then obtained in normal and LPS  $\pm$  SB mice to evaluate skin fibrosis. Representative images of Masson's trichrome stain and dermal thickness in skin tissues from normal and LPS  $\pm$  SB mice. n = 4-5/group. Scale bars = 100  $\mu$ m. \*p < 0.05, \*\*p < 0.01.

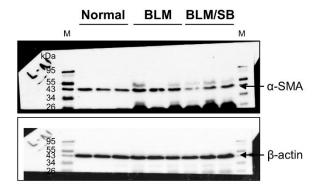
Uncropped images of the western blot analyses are presented in Figure S2–S4.



**Figure S2.** Western blot analysis of  $\alpha$ -SMA in skin tissues. BLM was injected subcutaneously on the back skin of mice five times a week for two weeks. SB was orally gavaged from two weeks before BLM injection. Skin tissues were then obtained in normal and BLM ± SB mice. After extracting proteins from skin tissues, western blot was performed to analyze  $\alpha$ -SMA protein expression.  $\beta$ -actin was used as a loading control. M: Size marker.



**Figure S3.** Western blot analysis of  $\alpha$ -SMA and Ac H3 in HDFs. Primary HDFs were stimulated with TGF- $\beta$ 1 (10 ng/mL) with or without SB (0.5–1 mM) for 48 h. Western blot was performed to analyze  $\alpha$ -SMA (A) and Ac-H3 protein expression (B).  $\beta$ -actin and H3 were used as a loading control for  $\alpha$ -SMA and Ac-H3, respectively. M: Size marker.



**Figure S4.** Western blot analysis of  $\alpha$ -SMA and  $\beta$ -actin in lung tissues. BLM was injected subcutaneously on the back skin of mice five times a week for two weeks. SB was orally gavaged from two weeks before BLM injection. Lung tissues were then obtained in normal and BLM ± SB mice. After extracting proteins from lung tissues, western blot was performed to analyze  $\alpha$ -SMA protein expression.  $\beta$ -actin was used as a loading control. M: Size marker.