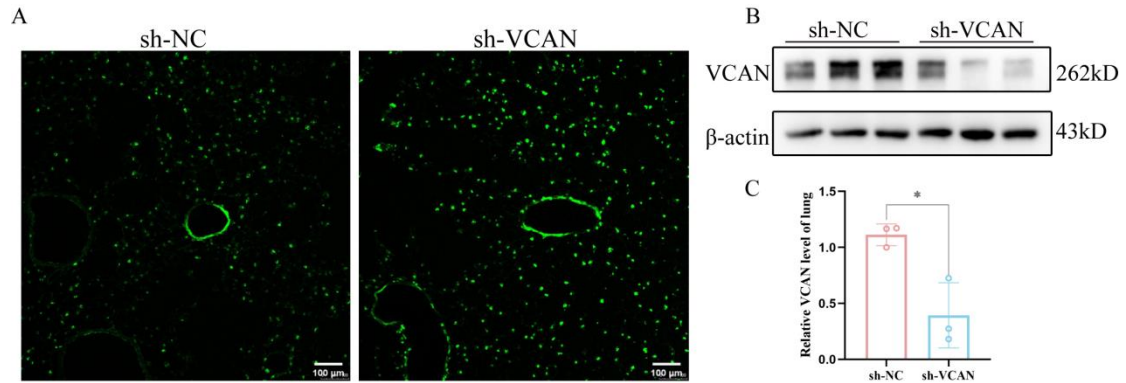


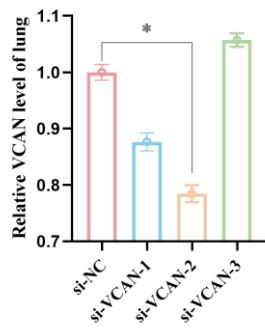
# **Supplemental Material**

**Figure S1. Efficiency verification of in vivo intervention experiments.**



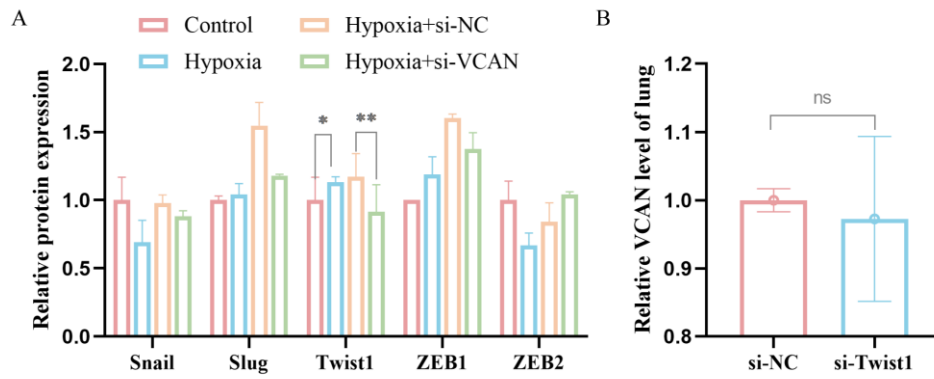
(A) Green fluorescence indicates that the adeno-associated virus has successfully reached the target site in mouse lung tissues (n=3).  $\times 100$ , scale bar: 100  $\mu\text{m}$ . (B, C) The protein level and densitometric quantification of VCAN were determined by western blot analysis after three weeks of AAV treatment.  $*P < 0.05$ . Abbreviations: VCAN, versican.

**Figure S2. Efficiency verification of in vitro experiments.**



RT-qPCR analysis of the mRNA level of VCAN in HPAECs of different intervention groups. \* $P < 0.05$ . Abbreviations: VCAN, versican.

**Figure S3. (A) RT-qPCR analysis of the mRNA level of five major TFs after knocking down VCAN in HPAECs. \*P < 0.05, \*\*P < 0.01. (B) RT-qPCR analysis of the mRNA level of VCAN after knocking down Twist1 in HPAECs.**



Abbreviations: ns, not significant; VCAN, versican; ZEB, zinc finger E-box binding homeobox protein.