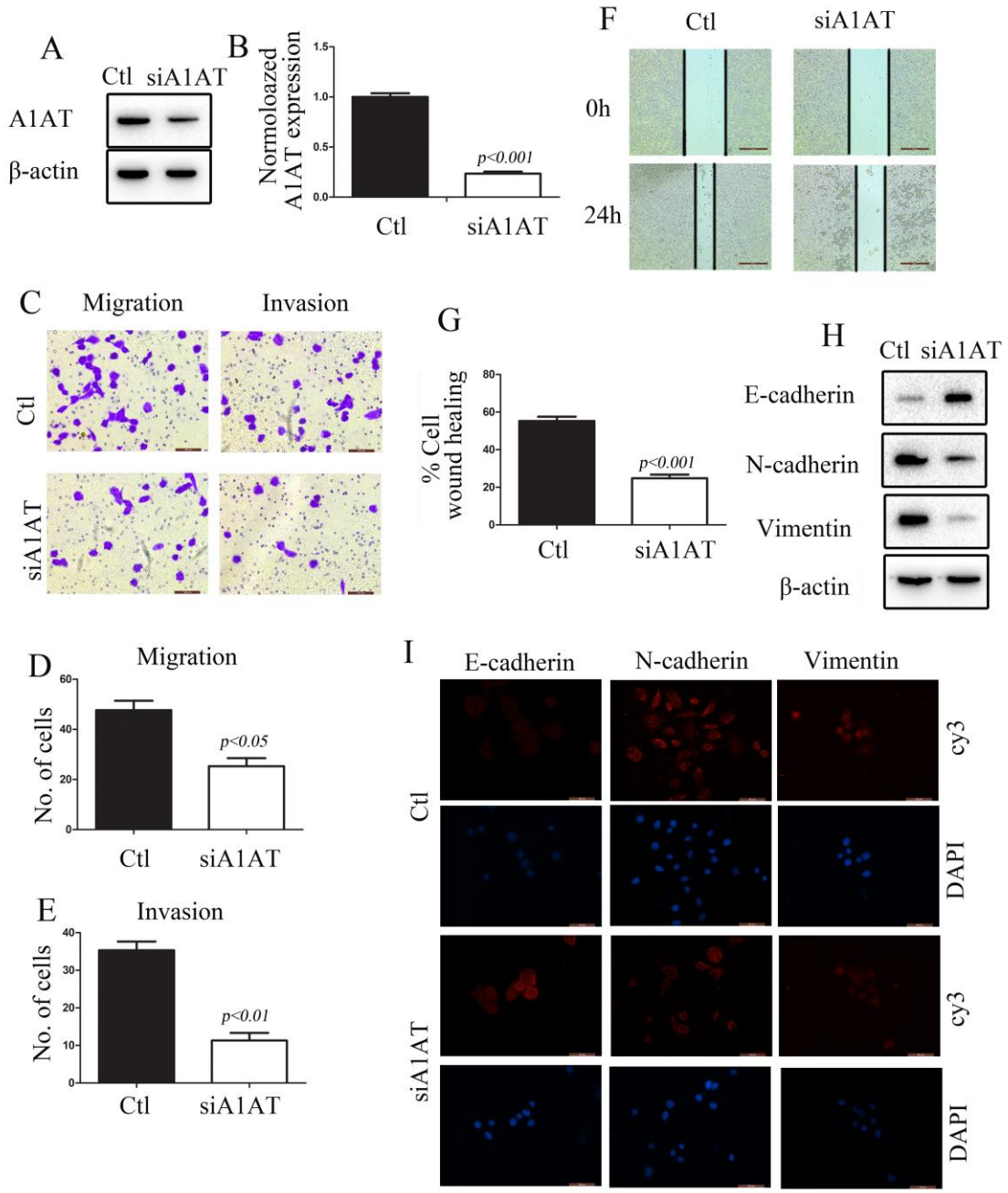
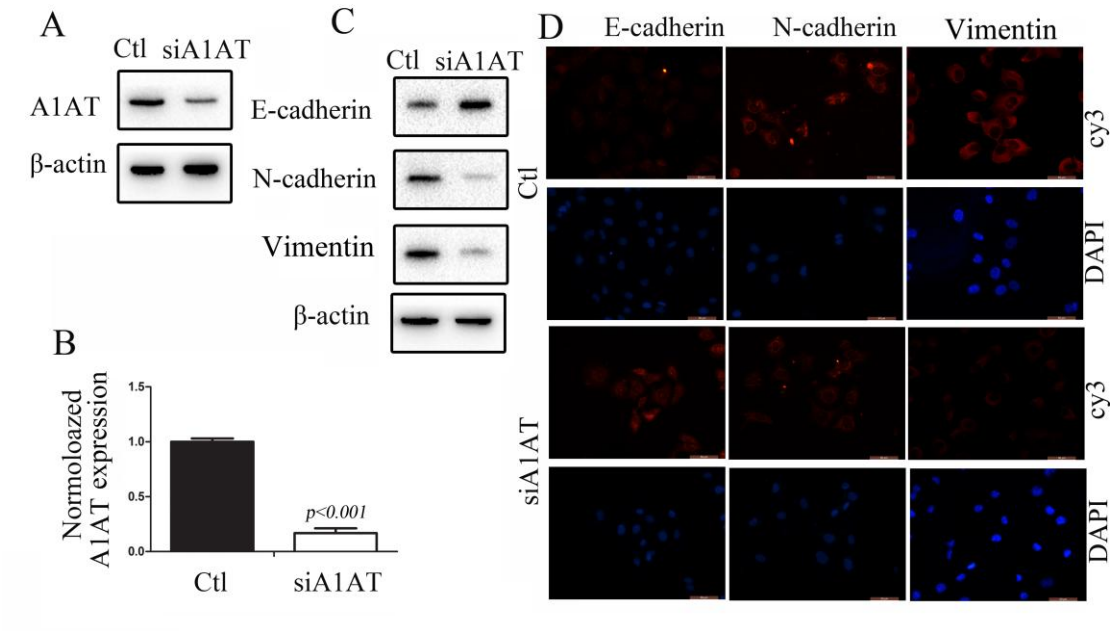
Supplementary Figure 1



(A,B) A1AT expression in H1650 knockdown and empty vector control (Ctl) cells by western blot analysis (A) and qPCR (B). (C,D,E) Cell migration was monitored in transwell assays and matrigel transwell assays with A1AT knockdown and Ctl H1650 cells (scale bar, 100 μm). Representative images (C) and quantitation (D,E) are shown. (F,G) Analysis of A1AT knockdown and Ctl cell migration in wound-healing assays

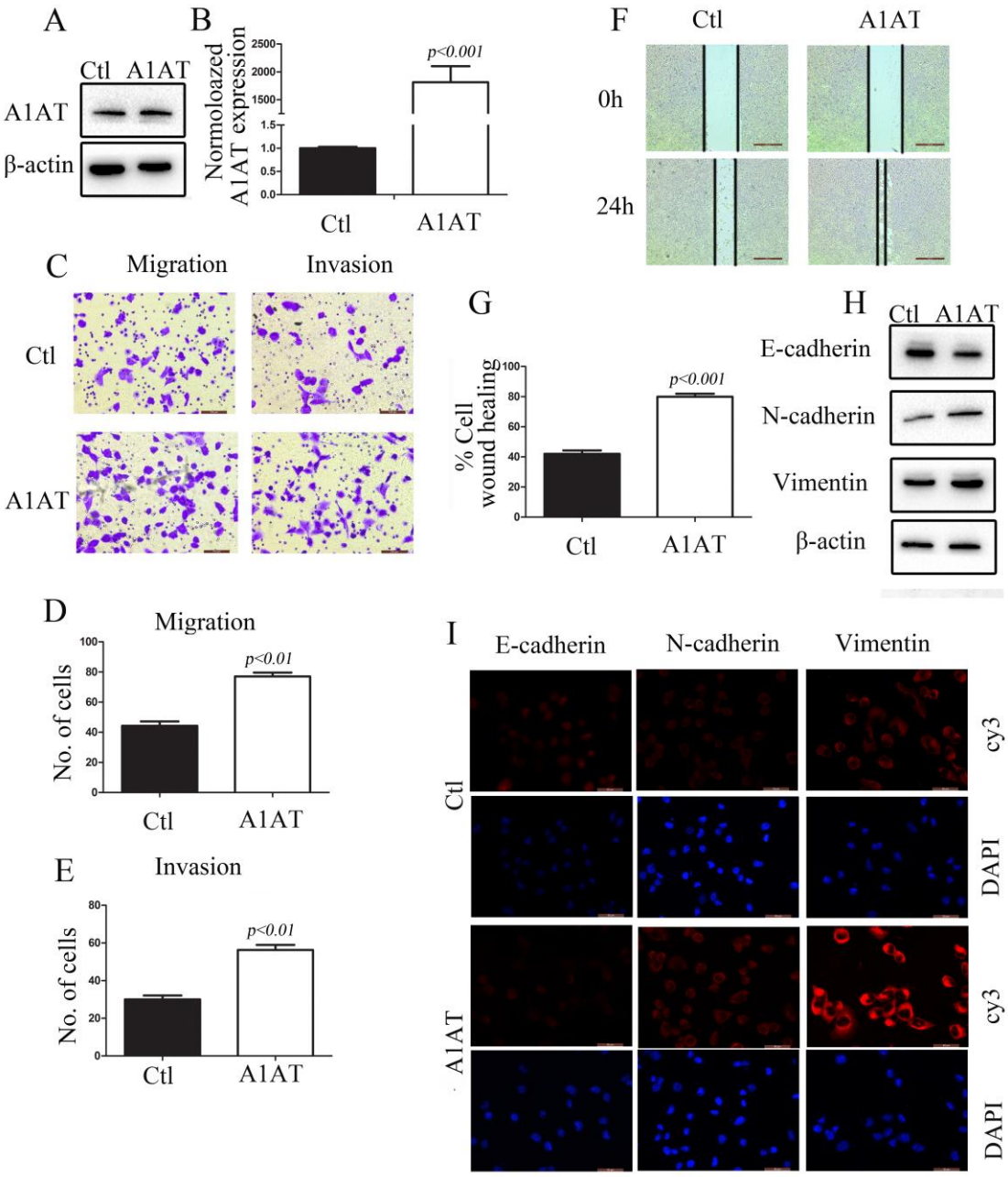
(scale bar, 500 μm). Representative images (F) and quantitation (G) are shown. (H,I) Analysis of E-cadherin (epithelial marker) and FSP-1 and N-cadherin (mesenchymal markers) expression in knockdown and control cells by immunofluorescence staining (I) and western blotting (H) (scale bar, 50 μm).

Supplementary Figure 2



(A,B) A1AT expression in Beas-2B knockdown and empty vector control (Ctl) cells by western blot analysis (A) and qPCR (B). (C,D) Analysis of E-cadherin (epithelial marker) and FSP-1 and N-cadherin (mesenchymal markers) expression in knockdown and control cells by immunofluorescence staining (D) and western blotting (C) (scale bar, 50 μm).

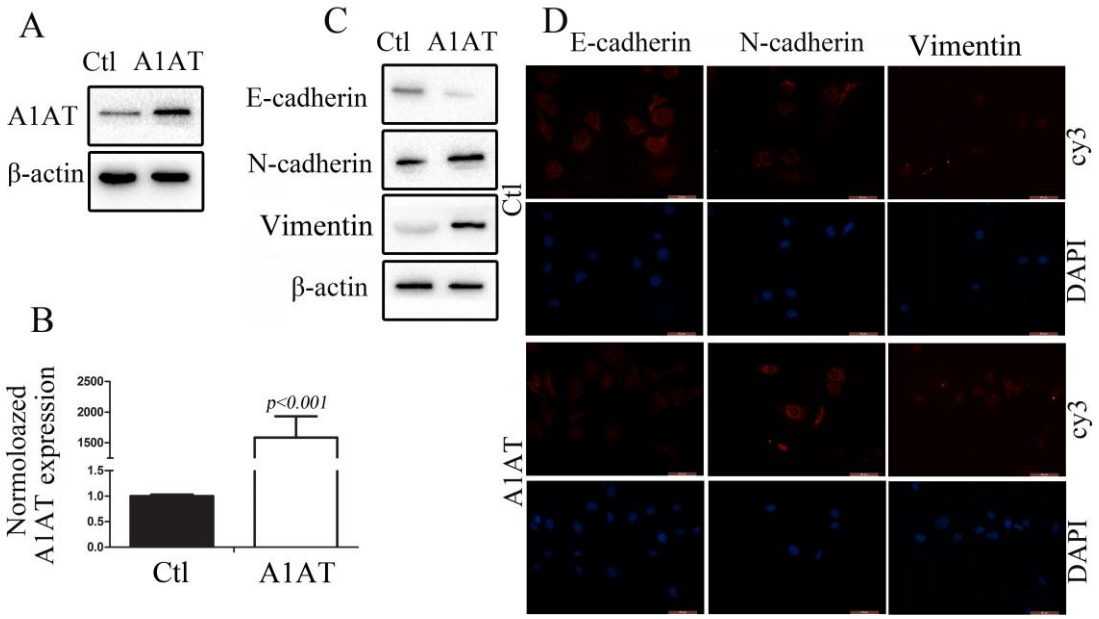
Supplementary Figure 3



(A,B) A1AT expression in H1650 overexprission and empty vector control (Ctl) cells by western blot analysis (A) and qPCR (B). (C,D,E) Cell migration was monitored in transwell assays and matrigel transwell assays with A1AT overexprission and Ctl H1650 cells (scale bar, 100 μm). Representative images (C) and quantitation (D,E) are shown. (F,G) Analysis of A1AT overexprission and Ctl cell migration in wound-healing assays (scale bar, 500 μm). Representative images (F) and quantitation (G) are

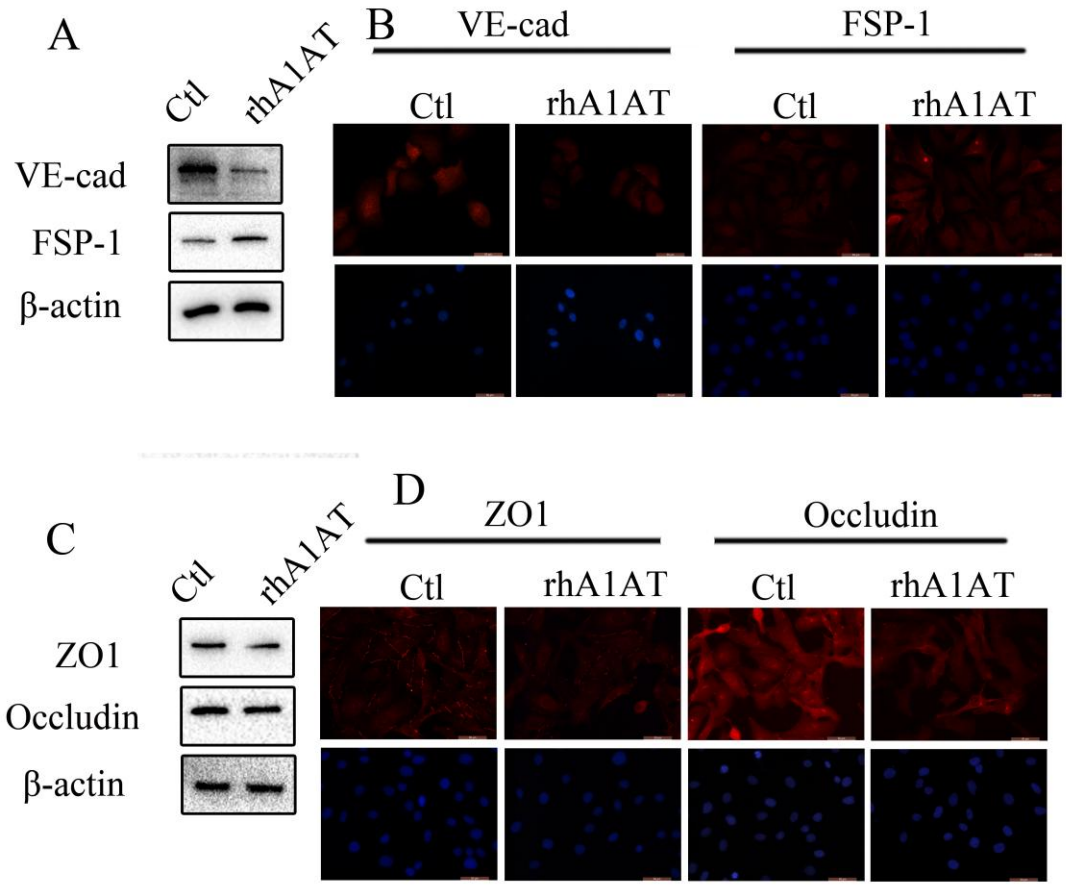
shown. (H,I) Analysis of E-cadherin (epithelial marker) and FSP-1 and N-cadherin (mesenchymal markers) expression in overexprission and control cells by immunofluorescence staining (I) and western blotting (H) (scale bar, 50 μm).

Supplementary Figure 4



(A,B) A1AT expression in Beas-2B overexprission and empty vector control (Ctl) cells by western blot analysis (A) and qPCR (B). (C,D) Analysis of E-cadherin (epithelial marker) and FSP-1 and N-cadherin (mesenchymal markers) expression in overexprission and control cells by immunofluorescence staining (D) and western blotting (C) (scale bar, 50 μm).

Supplementary Figure 5



(A,B) Analysis of the expression of VE-cadherin (endothelial marker) and FSP-1 (mesenchymal markers) in HMVECs after treaed by rhA1AT by western blotting (A) and immunofluorescence staining (B); scale bar, 50 μm.(C,D) Analysis of the expression of ZO1 and Occludin in HMVECs after treaed by rhA1AT by western blotting (C) and immunofluorescence staining (D); scale bar, 50 μm.