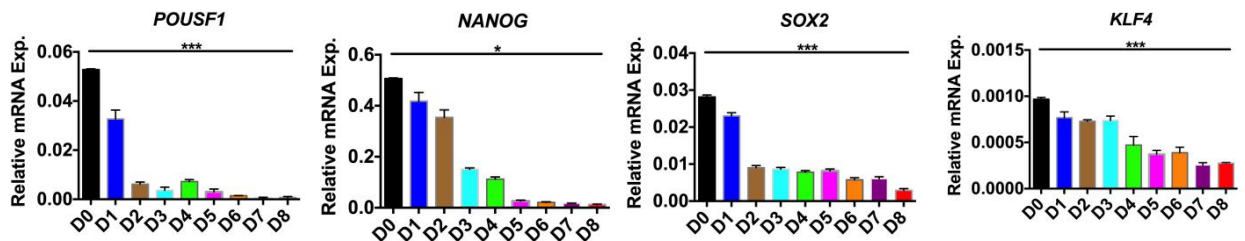
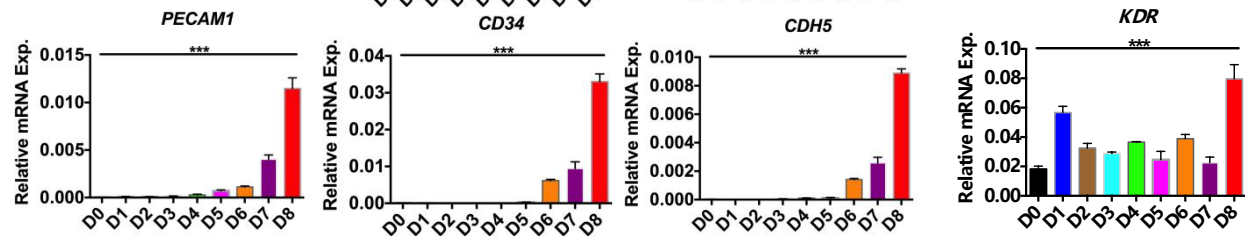


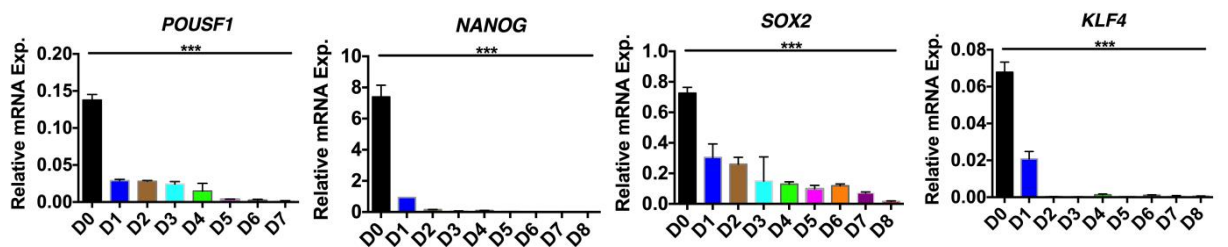
A hUiPSCs→hUiPSC-EPs



B



C hESCs→hESC-EPs



D

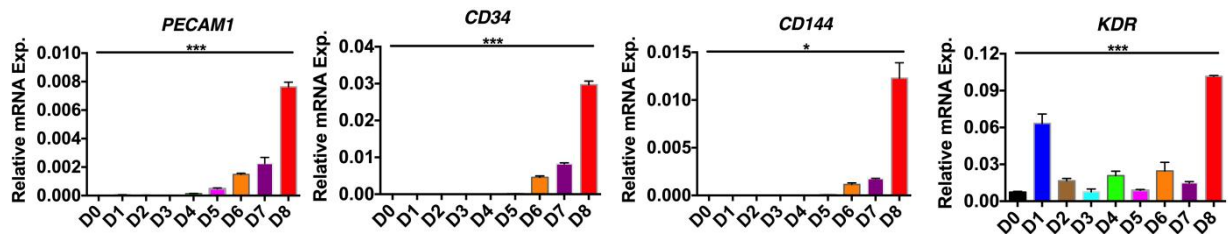


Fig. S1. HPSC-related genes and endothelial progenitor-related genes expression during hUiPSC-EPs or hESC-EPs differentiation.

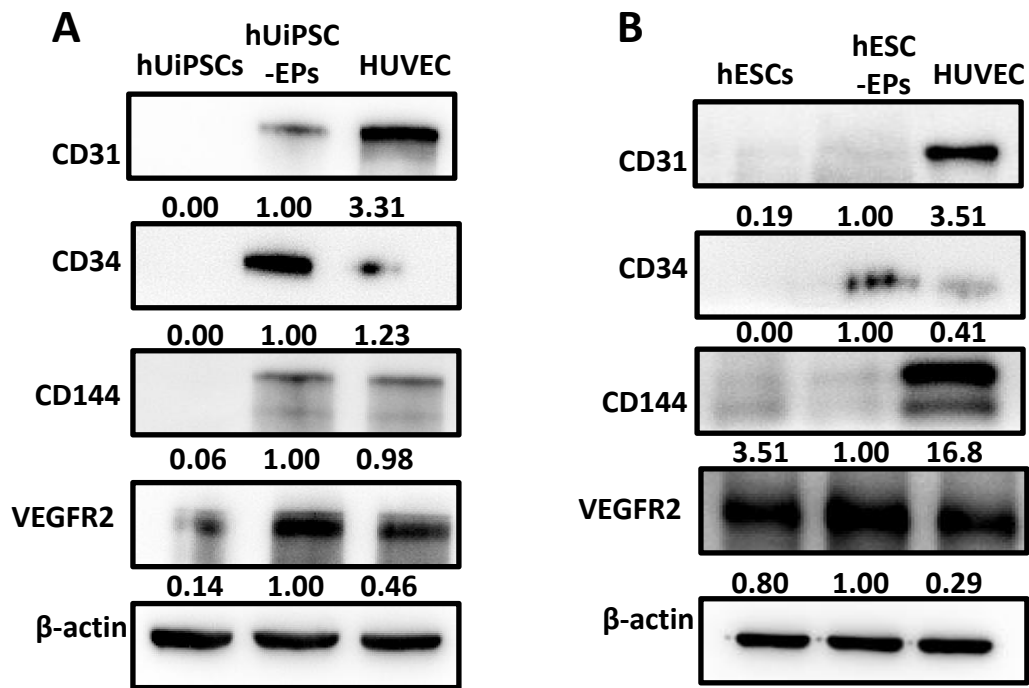


Fig. S2. Endothelial progenitor-related protein expression during hUiPSC-EPs or hESC-EPs differentiation.

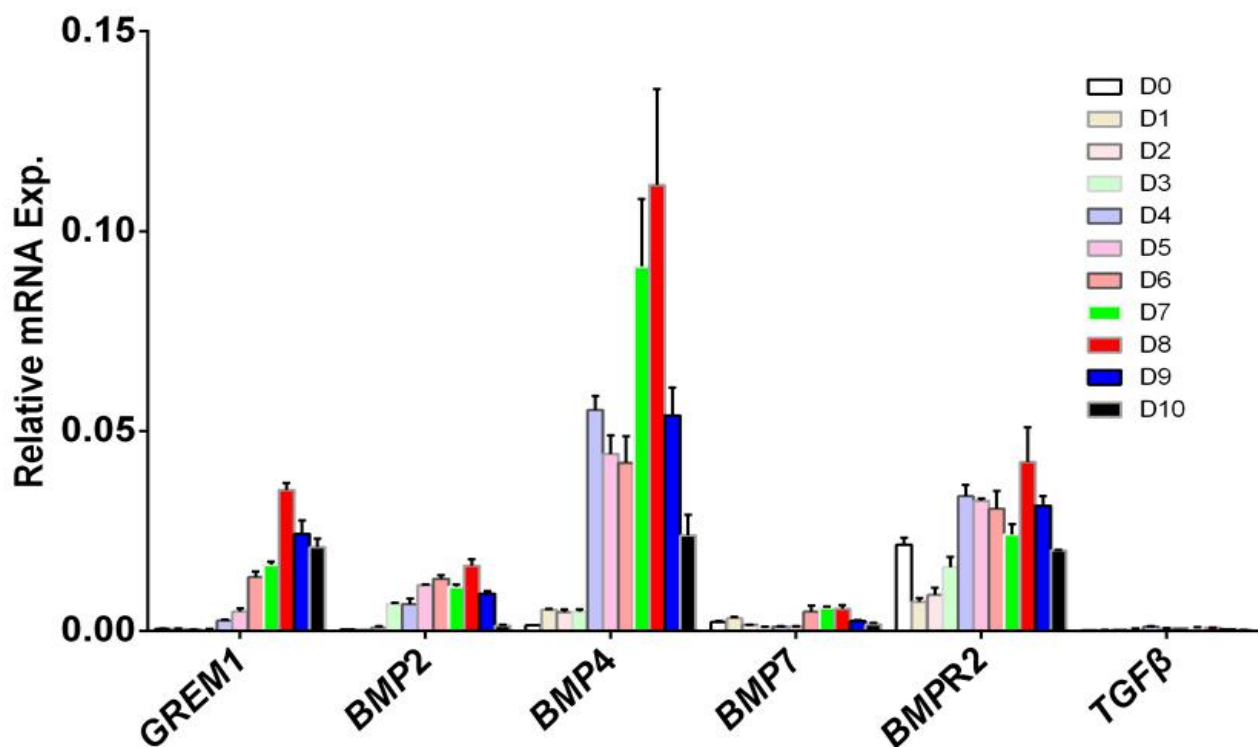


Fig. S3. GREM1 and related genes expression during hUiPSC-EPs differentiation.

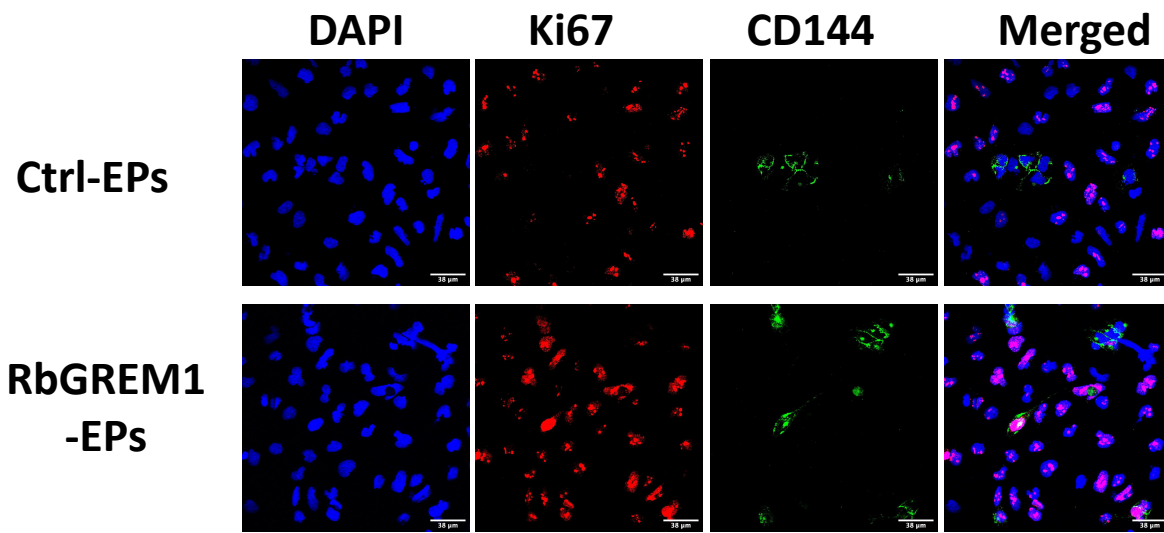
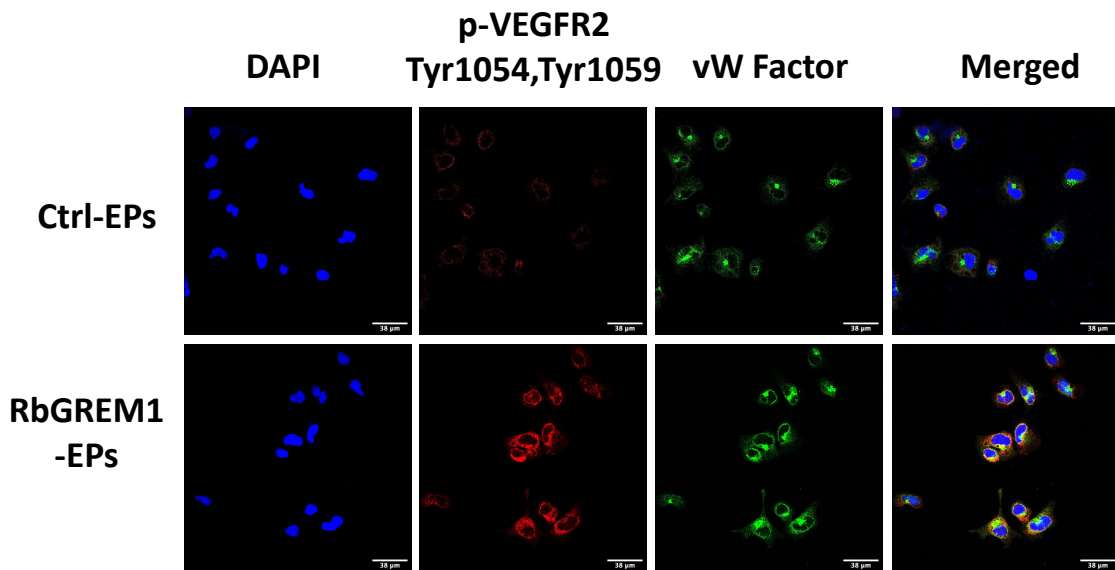


Fig. S4. Recombinant protein GREM1 during Stage 3 could promote proliferation in both endothelial and non-endothelial cells.

A



B

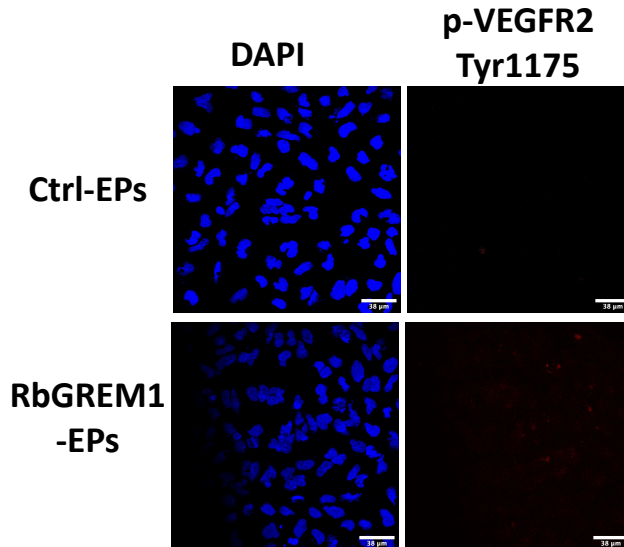


Fig. S5. Recombinant protein GREM1 during Stage 3 could induce phosphorylation of VEGFR2 in endothelial cells.

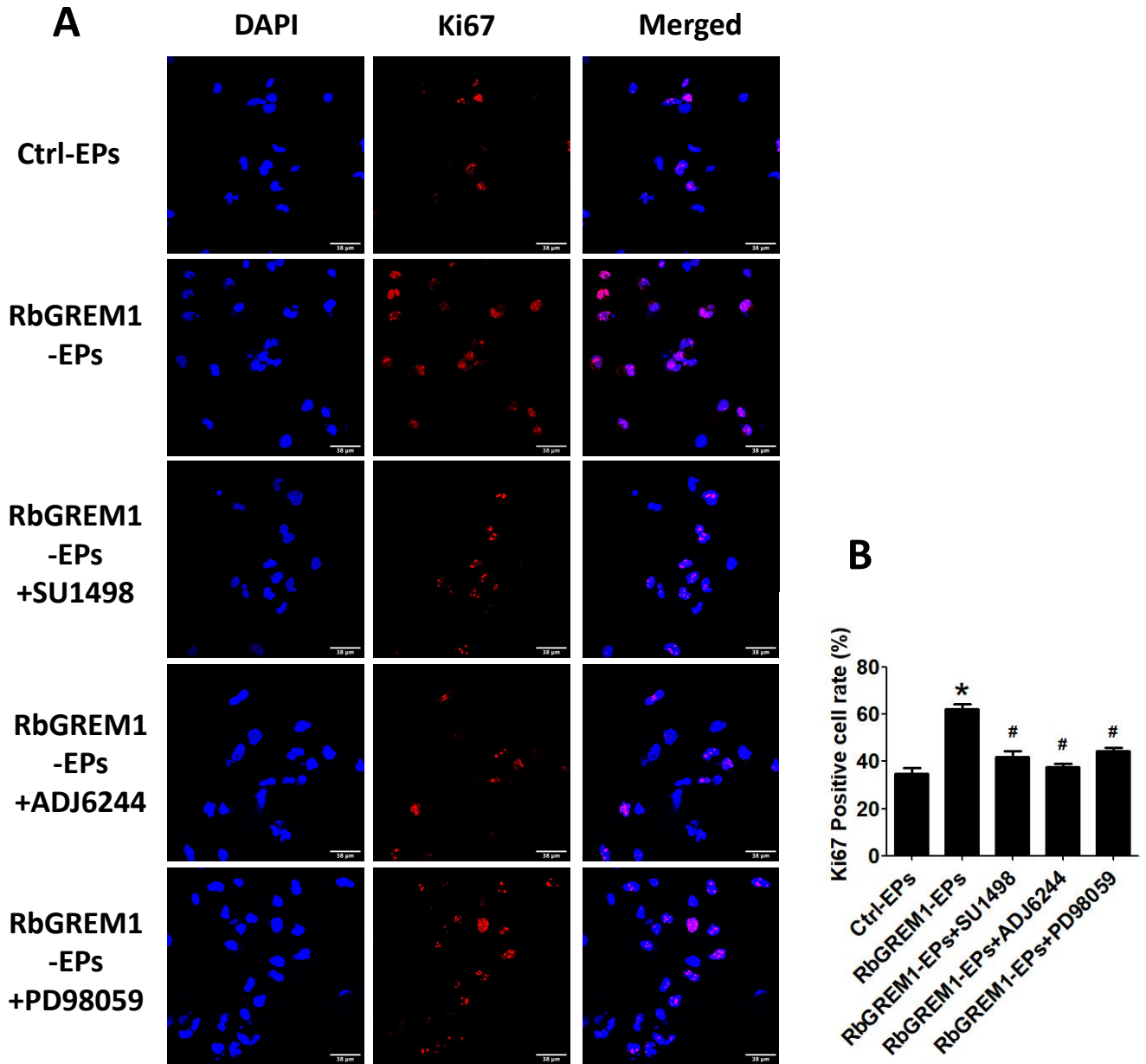


Fig. S6. The VEGFR2/Akt and VEGFR2/p42/44MAPK signal pathways mediated the effect of recombinant protein GREM1 during Stage 3.