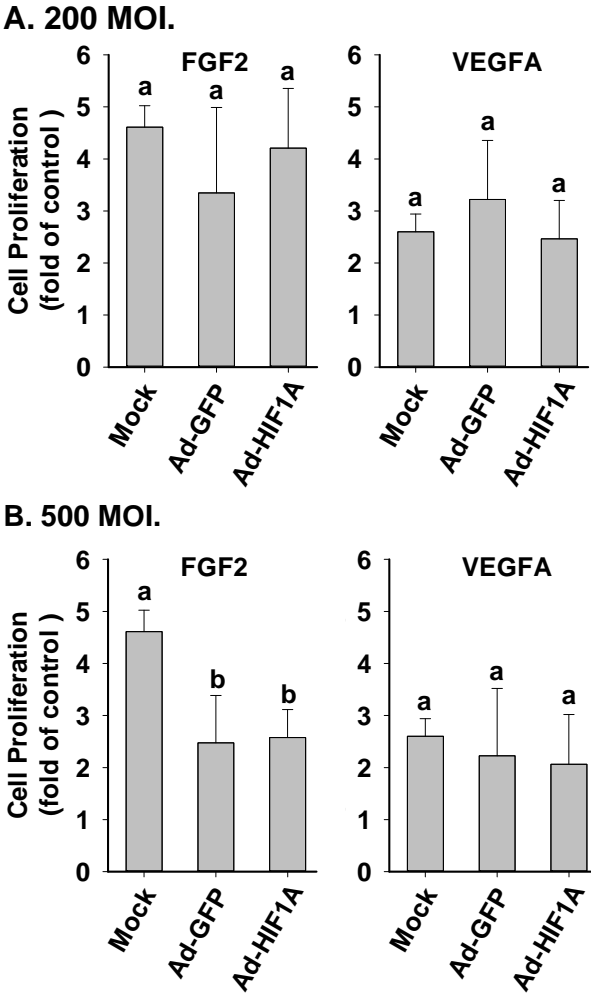
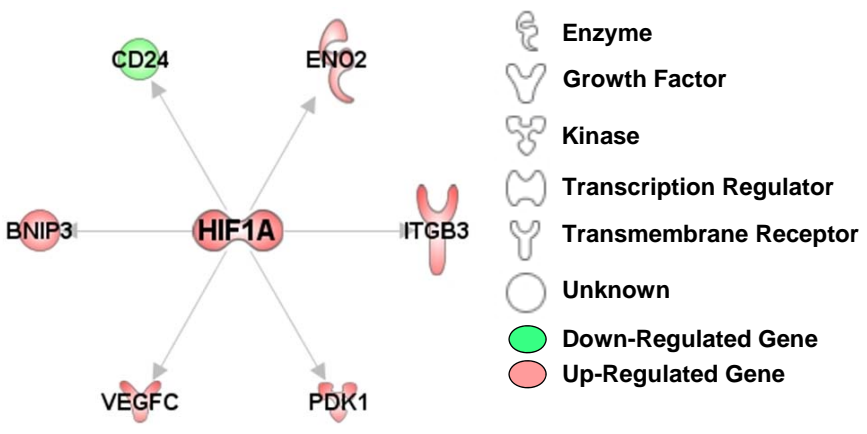


**Supplemental Fig. 1. Effects of HIF1A on HUVEC proliferation and migration.** (A, B) SCN-HUVECs were infected with 100 MOI of Ad-HIF1A or Ad-GFP and cultured under 21% O<sub>2</sub>. (C, D) PCN-HUVECs were transfected with 40 nM scrambled siRNA (SS), HIF1A siRNA (HIF), inverted siRNA (Inv) and vehicle (V). After 48 hr of adenovirus infection or siRNA transfection, followed by 24 hr of serum-starvation, cells proliferation and migration were determined. Data are expressed as means $\pm$  SEM fold of Ad-GFP control or vehicle control (n = 6).



**Supplemental Fig. 2. Effects of overexpression of HIF1A on FGF2- and VEGFA-stimulated proliferation of SCN-HUVECs.** SCN-HUVECs were infected with (A) 200 or (B) 500 MOI of Ad-HIF1A or Ad-GFP and cultured under 21% O<sub>2</sub>. After 40 hr infection and 8 hr serum-starvation, cells were treated with 10 ng/ml of FGF2 or VEGFA for 16 hr. Cell proliferation was determined by BrdU kits. Data are expressed as means± SEM fold of the corresponding no growth factor control. <sup>a,b</sup> Means with different letters differ from each other ( $p < 0.05$ ,  $n = 4$  cell preparations).

Supplemental Fig. 3



**Supplemental Fig. 3. HIF1A-regulated genes.** The regulation network was generated by Ingenuity Pathway Analysis software. All 62 PCN-regulated genes [25] were used as background. HIF1A activation Z-score is 1.375. Z-score higher than 2 is considered as activation. *BNIP3*: BCL2/adenovirus E1B 19kDa interacting protein 3; *CD24*: CD24 molecule; *ENO2*: enolase 2; *ITGB3*: integrin, beta 3; *PDK1*: pyruvate dehydrogenase kinase, isozyme 1; *VEGFC*: vascular endothelial growth factor C.