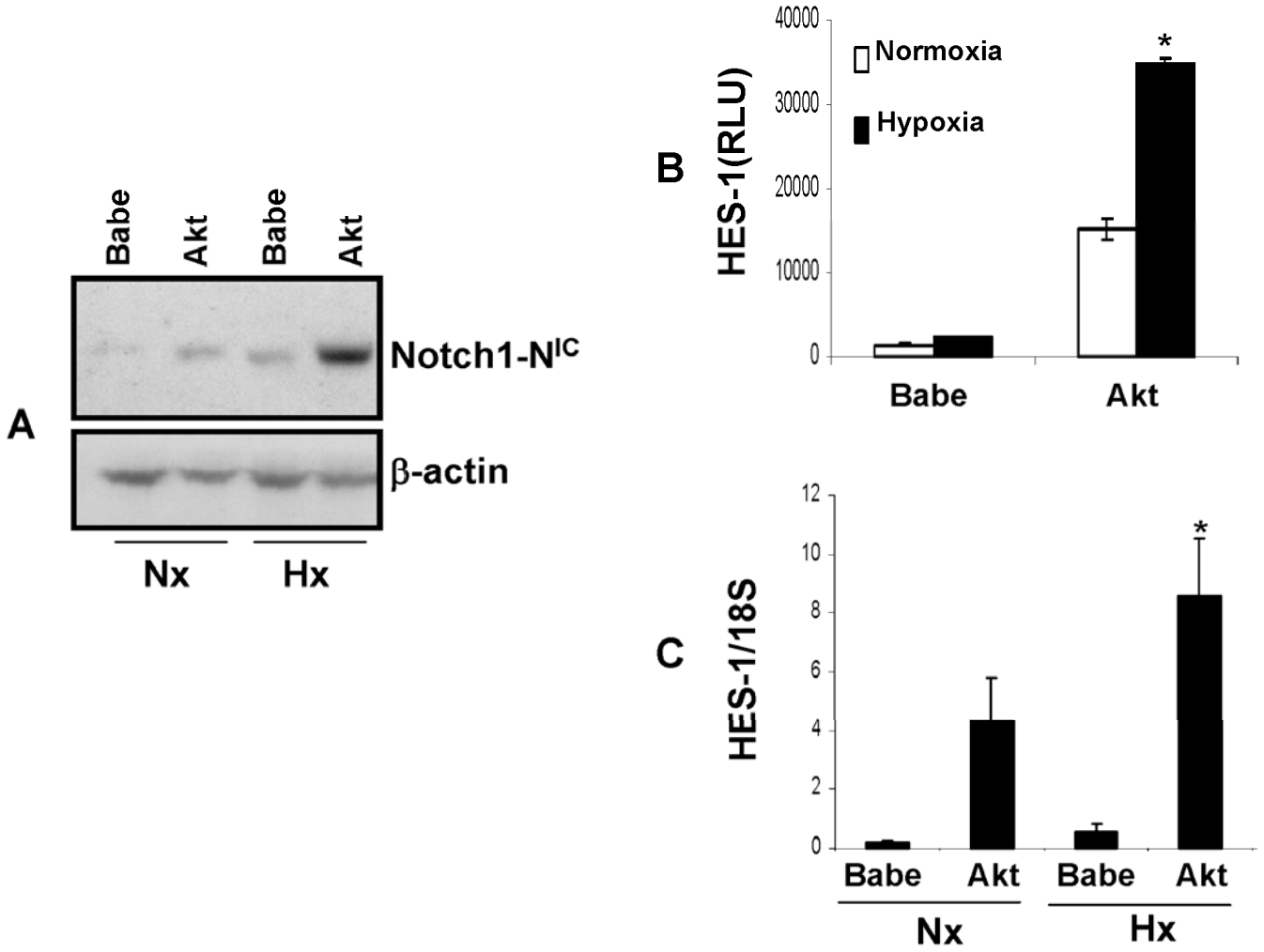
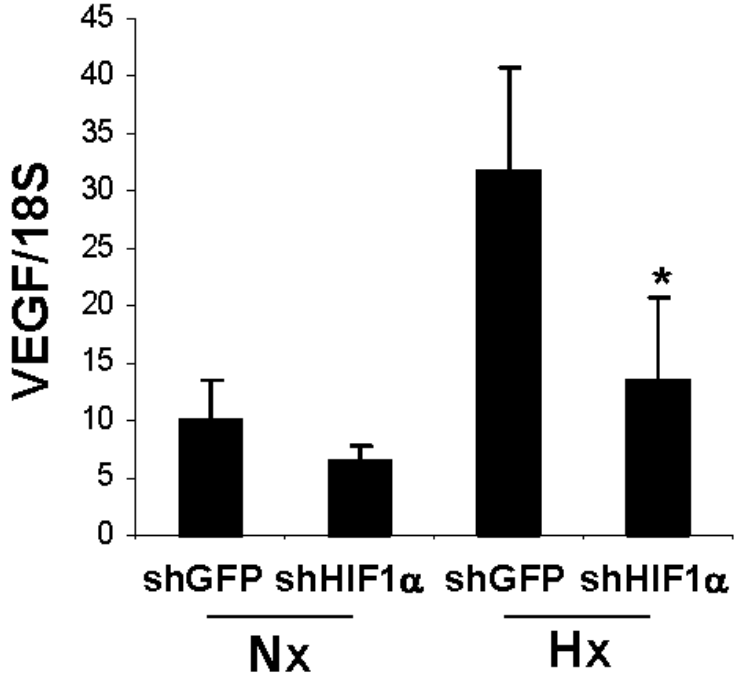
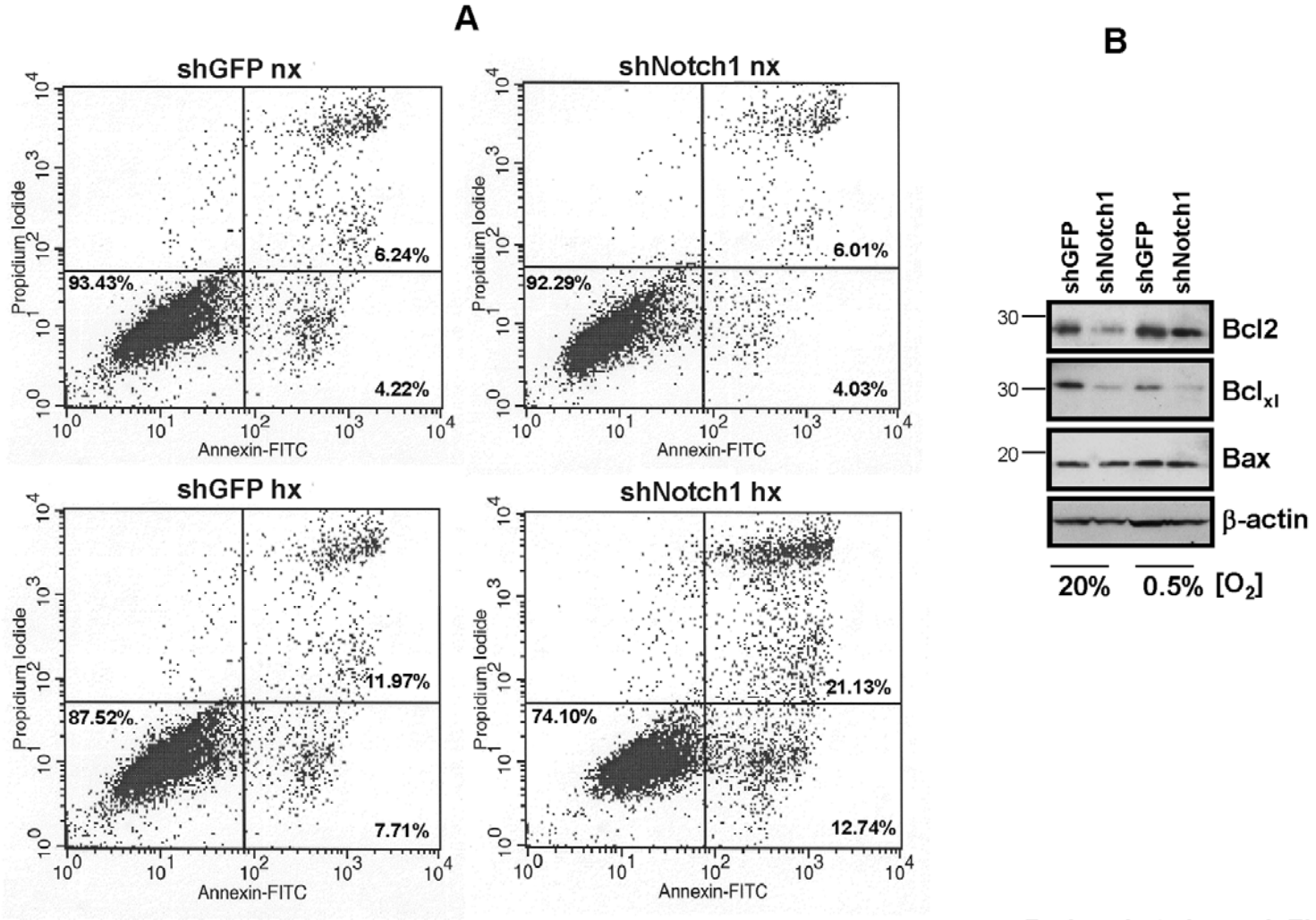


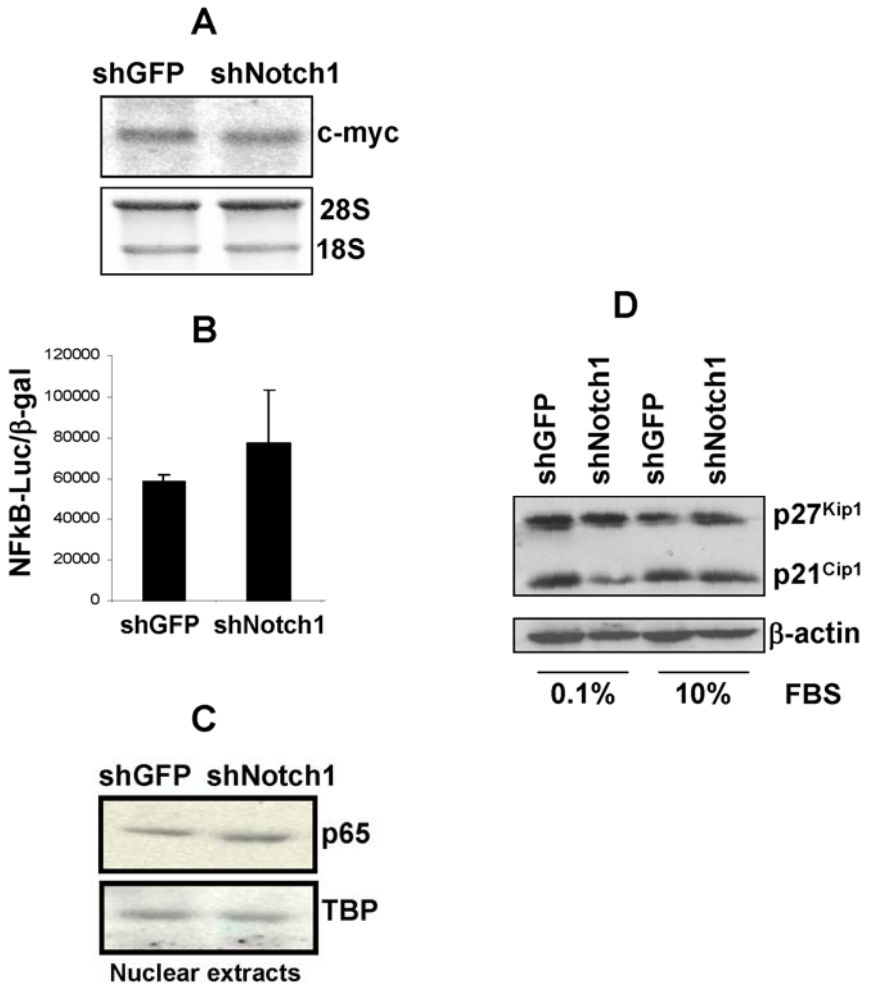
Supplementary Figure 1: *Induction of Notch1 signaling in hypoxia.* **A)** Western blot analysis of pBabe and Akt expressing melanocytes for Notch1-N^{IC} in hypoxia (2% O_2) compared to normoxia (20% O_2). **B)** HES1-reporter activity in pBabe and Akt expressing cells. **C)** HES1 expression in pBabe and Akt cells in normoxia and hypoxia measured by qRT-PCR. 18S serves as internal control to normalize the expression levels of the target gene. Results in B and C are the mean ± SD ($p<0.05\%$, Student's *t* test).



Supplementary Figure 2: H*ypoxia treatment of Akt melanocytes expressing shGFP or shHIF1α.* VEGF expression normalized to 18S was used to measure inhibition of HIF-1α by shHIF-1α in normoxia and 2% O_2. Result is the mean ± SD ($p<0.05\%$, Student's *t* test).



Supplementary Figure 3: *Inhibition of Notch1 expression results in cell death*. **A)** Flow cytometry profiles for Annexin V/PI staining of cells expressing an shRNA against Notch1 or an shGFP after exposure to normoxia or 0.5% O_2 for 48 hours. **B)** Western blot analysis for the anti-apoptotic proteins Bcl_{XL} and Bcl_2 and the pro-apoptotic protein Bax in Akt melanocytes expressing an shGFP or an shRNA against Notch1 and exposed to normoxia or 0.5% O_2 for 48 hours. β-actin was used as loading control.



Supplementary Figure 4: *Notch1 knock-down does not inhibit c-myc, NFkB, p21 or p27.* **A)** Northern blot analysis of cells expressing shGFP and shNotch1 probed with c-myc. 28S and 18S were used as loading controls. **B)** NFkB reporter activity in cells expressing a shGFP or shNotch1 **C)** Western blot on nuclear lysates for p65 protein. TBP was used as loading control. **D)** Western blot for $p21^{Cip1}$ and $p27^{Kip1}$ in shGFP and shNotch1 expressing cells. β-actin was used as loading control.