The role of WDR5 in silencing human fetal globin gene expression

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SUPPLEMENTARY APPENDIX

Online Supplementary Figure S2. HOXC8 gene expression in K562 cells over-expressing WDR5 or ING2. (A) HOXC8 gene expression analysis by Q-RT-PCR of RNA from WDR5 overexpression (WDR5-OE), knock-down (WDR5-KD), and scrambled control (Scr) K562 cells. (B) HOXC8 gene expression analysis by Q-RT-PCR of RNA from ING2 knock-down (ING2-KD) and scrambled control (Scr) K562 cells. Results are shown as mean ± SD from 3 independent experiments. #P>0.05, *P<0.05 compared to the scrambled control.

Online Supplementary Figure S1. ChIP primer sequences.

A B

Online Supplementary Figure S2. HOXC8 gene expression in K562 cells over-expressing WDR5 or ING2. (A) HOXC8 gene expression analysis by Q-RT-PCR of RNA from WDR5 overexpression (WDR5-OE), knock-down (WDR5-KD), and scrambled control (Scr) K562 cells. (B) HOXC8 gene expression analysis by Q-RT-PCR of RNA from ING2 knock-down (ING2-KD) and scrambled control (Scr) K562 cells. Results are shown as mean ± SD from 3 independent experiments. #P>0.05, *P<0.05 compared to the scrambled control.
Online Supplementary Figure S4. HDAC1 ChIP analyses at HOXC8 promoter from WDR5 overexpressing or vector control K562 cells. Results are shown as mean ± SD from 3 independent experiments. #P>0.05 compared to the vector control.

Online Supplementary Figure S5. NF-E4 ChIP analysis at the γ-promoter in erythroid progenitor cells from cord blood (CB) and adult bone marrow (BM). Results are shown as mean ± SD from 3 independent experiments. **P<0.01 compared to CB.

Online Supplementary Figure S6. Localization of WDR5 across the β-globin locus measured by ChIP in chromatin fractions from erythroid progenitors from cord blood. The precipitated DNA was amplified with primers specific for the indicated regions of the β-globin locus. HS: hypersensitive site; pro: promoter; G/Aγ: intergenic region between Gγ- and Aγ-globin genes; OR51B4: Olfactory receptor 51B4 gene. Results are shown as mean ± SD from 3 independent experiments. #P>0.05 compared to the IgG control. **P<0.01 compared to OR51B4-pro.