Figure S1. Cell growth and differentiation of lentiviral vector-transduced normal and β-thalassemic CD34+ cells using an in vitro model of erythropoiesis

(A) Left: Representative growth curves demonstrating fold-increase in developing erythroid cells derived from normal donor CD34+ cells either mock-transduced or transduced with the indicated vectors. Right Top: Flow cytometric analysis for CD235 expression on day 14 of culture. Right Bottom: Photomicrographs of Wright-Giemsa-stained cytospins of cells on day 15 of culture. (B) As above, except cells are derived from β-thalassemic CD34+ cells.
Figure S2. HPLC analysis of hemolysates from erythroid cells derived from normal CD34+ cells transduced with lentiviral vectors

Representative hemoglobin HPLC traces from normal erythroblasts transduced with the indicated vectors. Arrows indicated the HbA, HbF and acetylated HbF (AcHbF) forms.
Figure S3. Cell growth and analysis of the proportion of transduced erythroid cells derived from normal CD34+ cells as a function of time in culture
(A) Growth curve of developing erythroid cells derived from normal donor CD34+ cells either mock-transduced or transduced with the indicated vectors. (B) Flow cytometric analysis of GFP and CD235 (Glycophorin A) expression in cells transduced with the indicated vectors is shown as a function of time in erythroid culture.
Figure S4. Analysis of the proportion of transduced erythroid cells derived from β-thalassemic CD34+ cells as a function of time in culture
Flow cytometric analysis for GFP and CD235 (Glycophorin A) expression in erythroid cells derived from transduced β-thalassemic CD34+ cells at the indicated time points during erythroid culture.
Figure S5. Low levels of TUNEL positive cells in erythroid cultures derived from both untransduced and transduced β-thalassemic CD34+ cells
Flow cytometric analysis for TUNEL positive (see Materials and Methods) erythroid cells derived from β-thalassemic CD34+ cells either mock-transduced or transduced with the indicated vectors. The percentage of TUNEL positive cells is indicated for each histogram.