Description of Additional Supplementary Files

File Name: Supplementary Data 1
Description: Differential mRNA expression in wildtype vs \textit{Nsd1}^{-/-} BM erythroblasts

File Name: Supplementary Data 2
Description: Addback of SET mutated \textit{Nsd1} into \textit{Nsd1}^{-/-} vs addback of wildtype \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential mRNA expression after 24h in differentiation medium

File Name: Supplementary Data 3
Description: Gene Set Enrichment Analysis (GSEA) of significantly up- or down regulated genes according to shrunken log fold changes between maintenance medium (0h) and differentiation medium (24h) of cells rescued with add back of wildtype \textit{Nsd1}

File Name: Supplementary Data 4
Description: Gene Set Enrichment Analysis (GSEA) of significantly up- or down regulated genes according to shrunken log fold changes between wildtype add back of \textit{Nsd1} and add back of SET mutated \textit{Nsd1} at 24h in differentiation medium

File Name: Supplementary Data 5
Description: Addback of SET mutated \textit{Nsd1} into \textit{Nsd1}^{-/-} vs addback of wildtype \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential expression of protein after 24h in differentiation medium

File Name: Supplementary Data 6
Description: Addback of SET mutated \textit{Nsd1} into \textit{Nsd1}^{-/-} vs addback of wildtype \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential binding of GATA1 ChIP-seq after 24h in differentiation medium

File Name: Supplementary Data 7
Description: Addback of SET mutated \textit{Nsd1} into \textit{Nsd1}^{-/-} vs addback of wildtype \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential binding of H3K36me3 ChIP-seq after 24h in differentiation medium

File Name: Supplementary Data 8
Description: Addback of SET mutated \textit{Nsd1} into \textit{Nsd1}^{-/-} vs addback of wildtype \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential binding of H3K27ac ChIP-seq after 24h in differentiation medium

File Name: Supplementary Data 9
Description: Addback of SET mutated \textit{Nsd1} into \textit{Nsd1}^{-/-} vs addback of wildtype functional \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential protein expression following IP of GATA1 after 24h in differentiation medium (normalized to the IgG IP control)

File Name: Supplementary Data 10
Description: Addback of wildtype functional \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential protein expression following IP of GATA1 after 24h in differentiation medium

File Name: Supplementary Data 11
Description: Addback of SET mutated \textit{Nsd1} into \textit{Nsd1}^{-/-}. Differential protein expression following IP of GATA1 after 24h in differentiation medium
File Name: Supplementary Data 12
Description: Gene expression signature from ErythonDb: "ERYTHROID LINEAGE DEVELOPMENT" was obtained using the functionality "Build Gene Lists" within an erythropoietic lineage in a comparison between proerythroblasts and basophilic erythroblasts