

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: (SM1_GFP): 3D reconstruction resulting from 2-photon microscopy on GFP electroporated cortices (2 days) after tissue clarification (X-Clarity system).

File Name: Supplementary Movie 2

Description: (SM2_G870S): 3D reconstruction resulting from 2-photon microscopy on SETBP1 electroporated cortices (2 days) after tissue clarification (X-Clarity system).

File Name: Supplementary Data 1

Description: Genomic regions bound by SETBP1-G870S.

File Name: Supplementary Data 2

Description: Genes whose promoter is ectopically bound by SETBP1-G870S.

File Name: Supplementary Data 3

Description: List of 2687 genes differentially expressed between SETBP1-G870S and Empty 293 FLP-In lines.

File Name: Supplementary Data 4

Description: Genes differentially expressed in SETBP1-G870S vs. Empty 293 FLP-In lines whose promoter is occupied by SETBP1-G870S.

File Name: Supplementary Data 5

Description: Differentially expressed genes characterized by increase in H3K4me2 and H3K9ac marks.

File Name: Supplementary Data 6

Description: Co-immunoprecipitation/mass-spectrometry data.

File Name: Supplementary Data 7

Description: Binned (200bp), normalized ATAC-Seq data for 293 FLP-In Empty.

File Name: Supplementary Data 8

Description: Binned (200bp), normalized ATAC-Seq data for 293 FLP-In SETBP1-WT.

File Name: Supplementary Data 9

Description: Binned (200bp), normalized ATAC-Seq data for 293 FLP-In SETBP1-G870S.

File Name: Supplementary Data 10

Description: MECOM target genes involved in hematopoietic stem-cell proliferation and myeloid differentiation.