
Supplementary information

RNA m⁵C oxidation by TET2 regulates chromatin state and leukaemogenesis

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RNA m⁵C oxidation by TET2 regulates chromatin state and leukemogenesis

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SUPPLEMENTARY INFORMATION

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Supplementary Table 1: Summary of high-throughput sequencing samples. Antibodies and library sources were indicated.

Supplementary Table 2: Sequences of qPCR primers, siRNAs, oligo nucleotides, antisense oligos, and guide RNAs. Experiment type and references were indicated.

Fig. 3e and Extended Data Fig. 6c
Flag as loading control

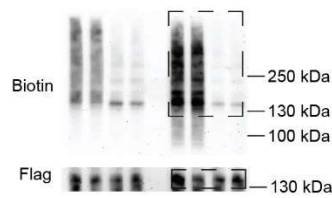
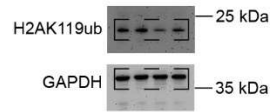
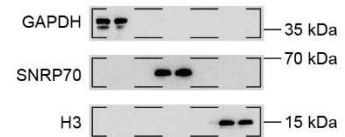


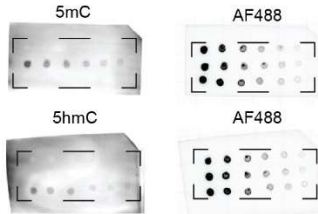
Fig. 5b, GAPDH as loading control



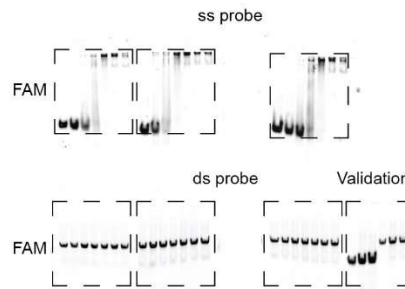
Extended Data Fig. 1p



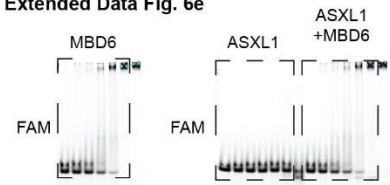
Extended Data Fig. 2b, Alexa Fluor 488
as loading control



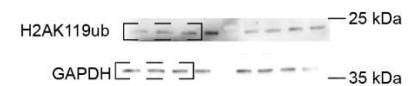
Extended Data Fig. 6d



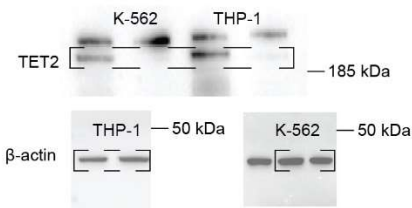
Extended Data Fig. 6e



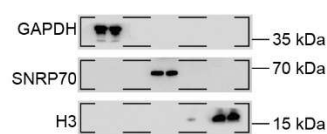
Extended Data Fig. 6i
GAPDH as loading control



Extended Data Fig. 9b, β -actin as sample processing control

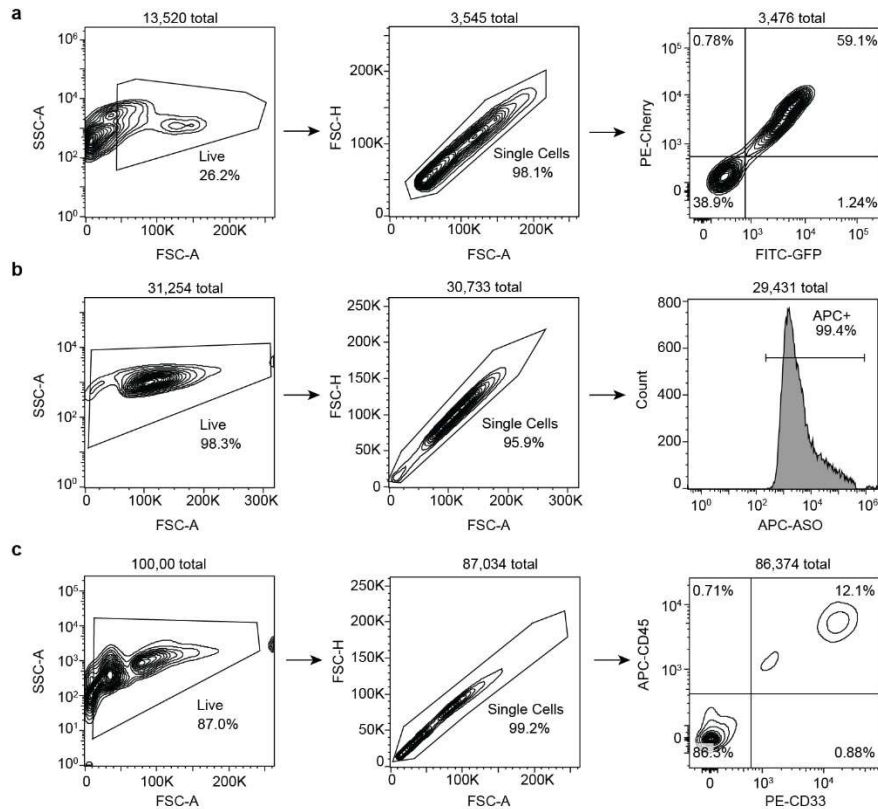


Extended Data Fig. 10a



Supplementary Figure 1 | Uncropped scans with size marker indications

Full scans of western blots and EMSA for the indicated figure panels. Dashed boxes indicate areas being cropped and displayed.

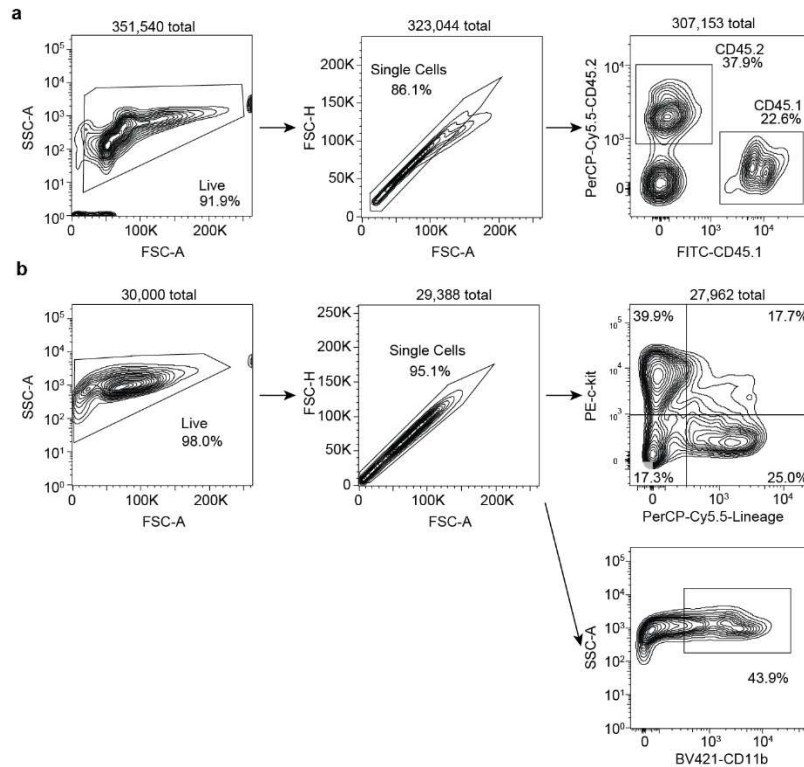


Supplementary Figure 2 | Gating strategies for single-colour flow cytometry

a, Forward scatter (FSC-A) versus side scatter (SSC-A) was set to gate all live hematopoietic cells, but exclude small debris. All single cells are gated by FSC-H/FSC-A, but exclude cell clumps. PE and FITC are used to gate cherry and GFP labeling respectively. For Extended Data Fig. 8b.

b, Forward scatter (FSC-A) versus side scatter (SSC-A) was set to gate all live hematopoietic cells, but exclude small debris. All single cells are gated by FSC-H/FSC-A, but exclude cell clumps. APC is used to gate Cy5 labeled ASO. For Extended Data Fig. 8f.

c, Forward scatter (FSC-A) versus side scatter (SSC-A) was set to gate all live hematopoietic cells, but exclude small debris. All single cells are gated by FSC-H/FSC-A, but exclude cell clumps. Human leukemia donor cells are enriched by human CD45 or CD33. For Extended Data Fig. 9i.



Supplementary Figure 3 | Gating strategies for multiple-colour flow cytometry

a, Forward scatter (FSC-A) versus side scatter (SSC-A) was set to gate all live hematopoietic cells, but exclude small debris. All single cells are gated by FSC-H/FSC-A, but exclude cell clumps. Donor cells are enriched by mouse CD45.2. For Fig. 4b,c.

b, Forward scatter (FSC-A) versus side scatter (SSC-A) was set to gate all live hematopoietic cells, but exclude small debris. All single cells are gated by FSC-H/FSC-A, but exclude cell clumps. Mouse HSPCs cells are enriched by Lin⁻c-kit⁺ population. Myeloid cells are enriched by CD11b population. For Fig. 4g, Extended Data Fig. 7d,k, Extended Data Fig. 8d,e, h, i.