

Chromatin protein complexes involved in gene repression in lamina-associated domains

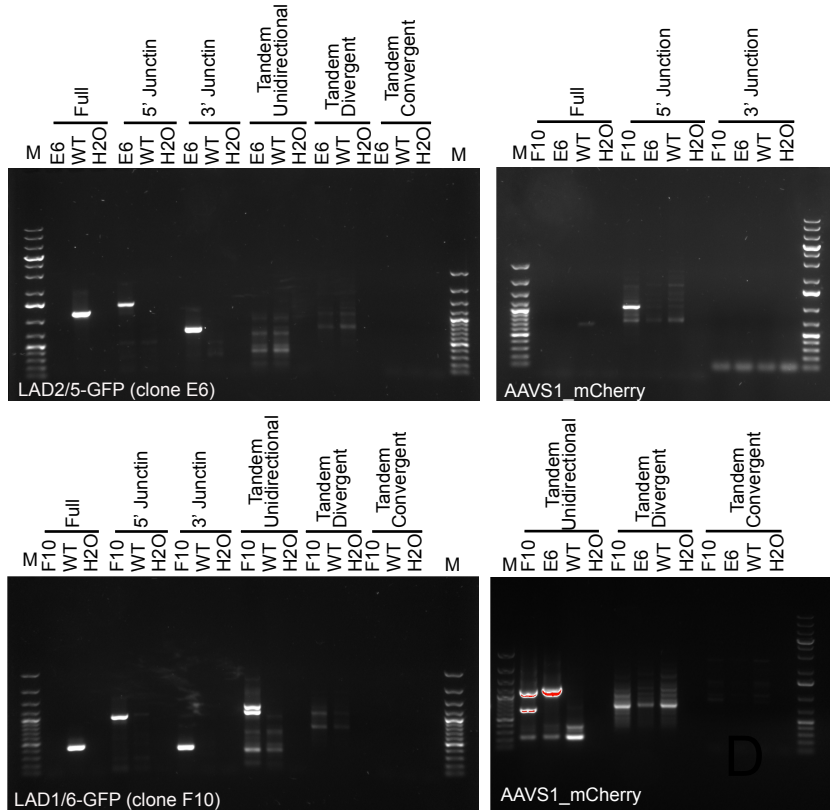
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APPENDIX

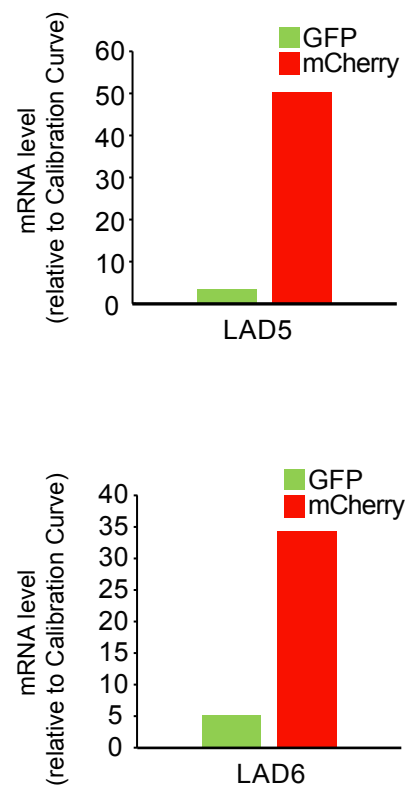
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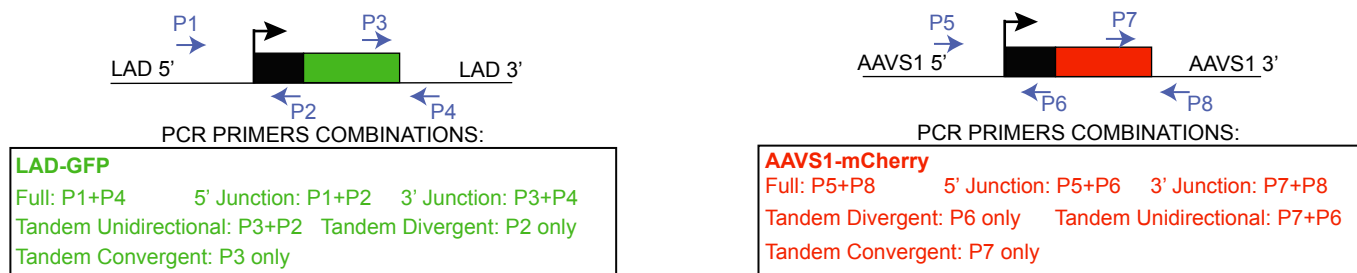
A



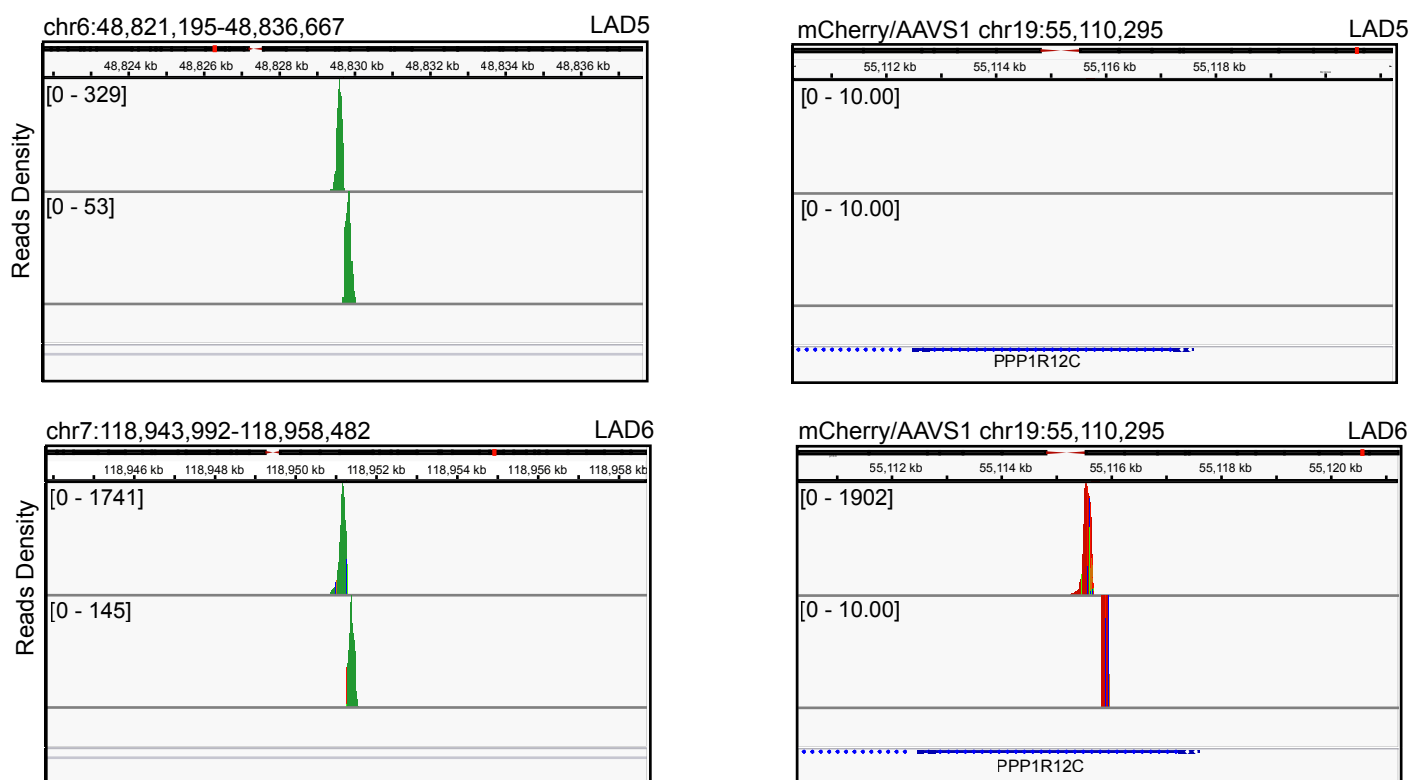
D



B

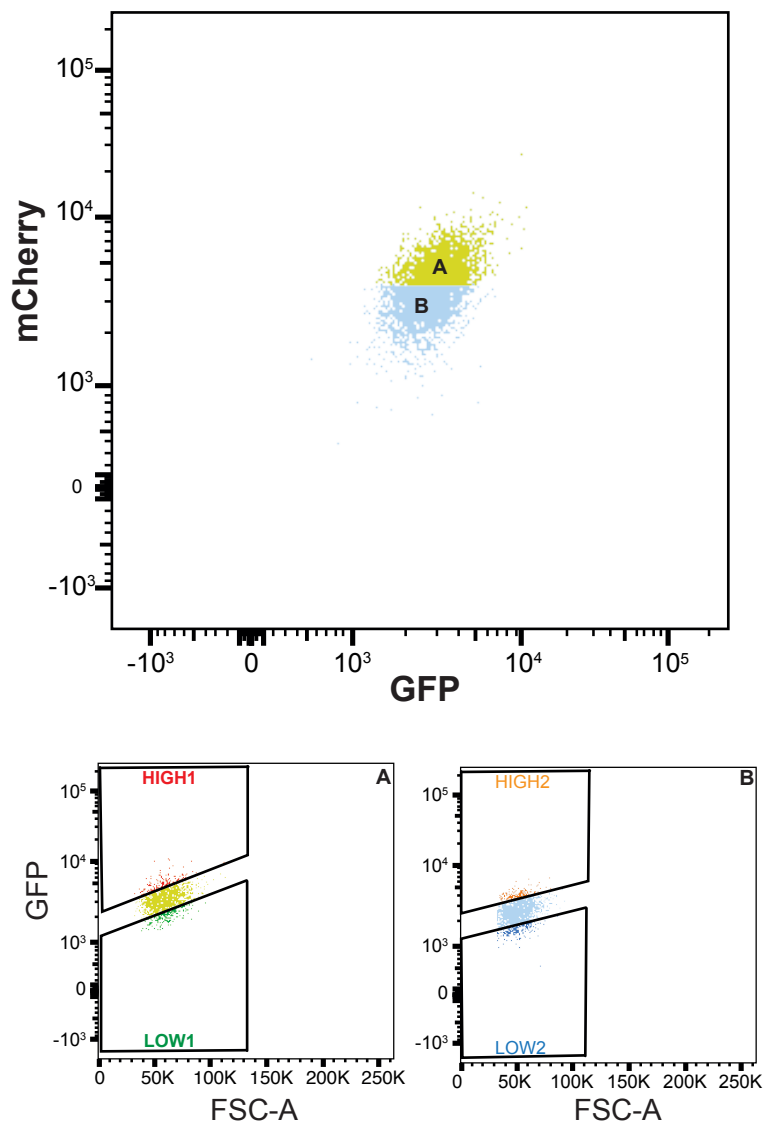


C

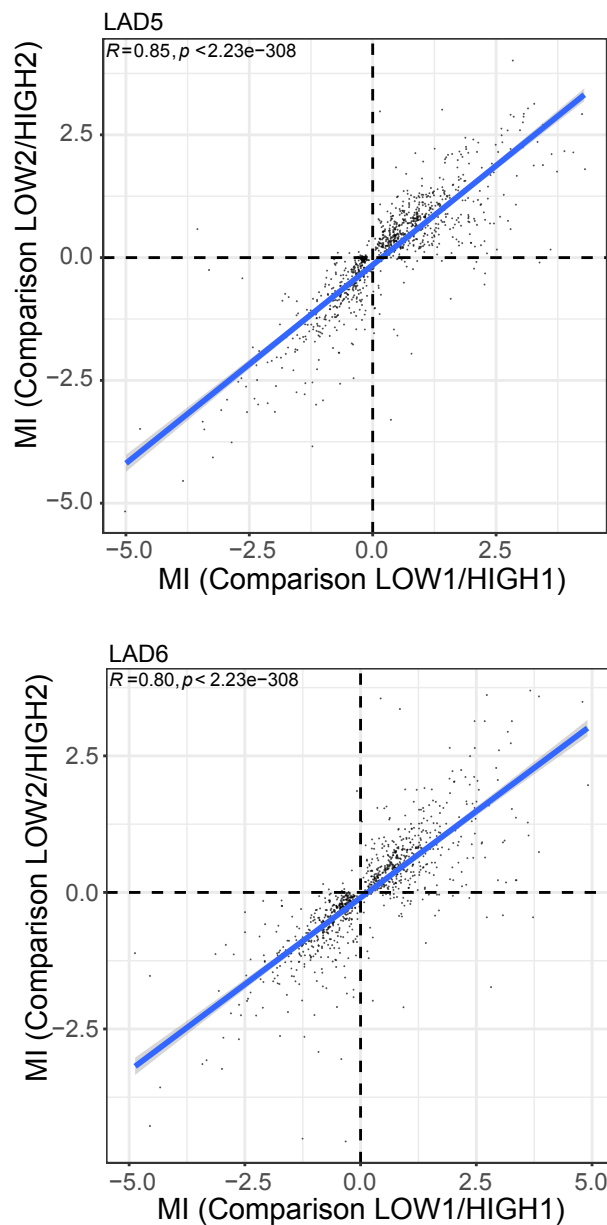


Appendix Figure S1 A) Genotyping PCR for GFP and mCherry reporters in the selected genomic locations. Genomic DNA from wild-type HAP1 cells was used as negative control. B) Schematic of all primer combinations used in the genotyping PCR. C) Tag-Map reads around integration sites for LAD-GFP reporters and AAVS1-mCherry. D) mRNA level for GFP and mCherry for the two LAD-reporter cell lines. mRNA levels were calculated by interpolating qPCR CT values on a calibration curve generated with GFP and mCherry plasmids to intrinsically normalize for primer efficiency.

A

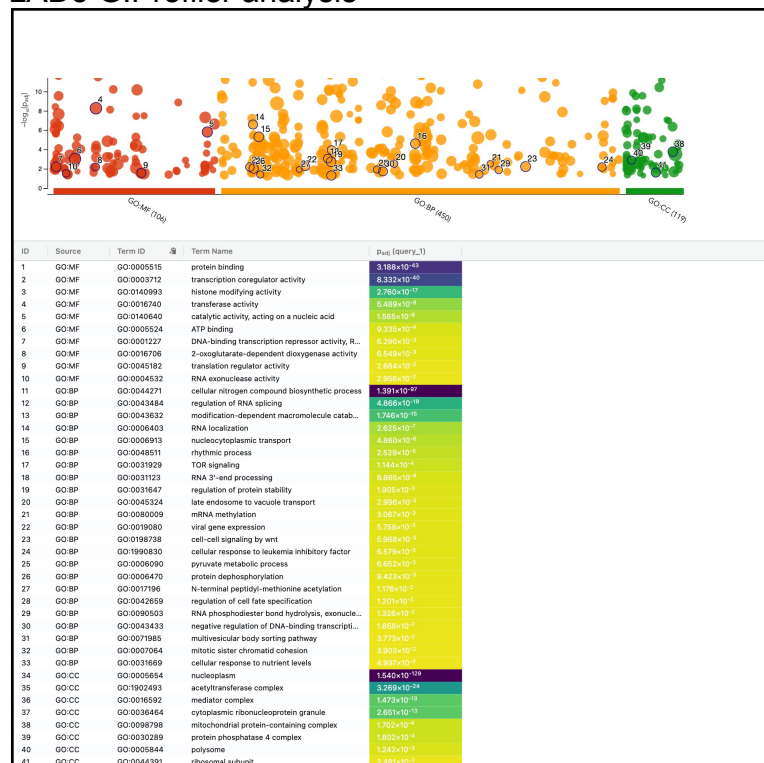


B

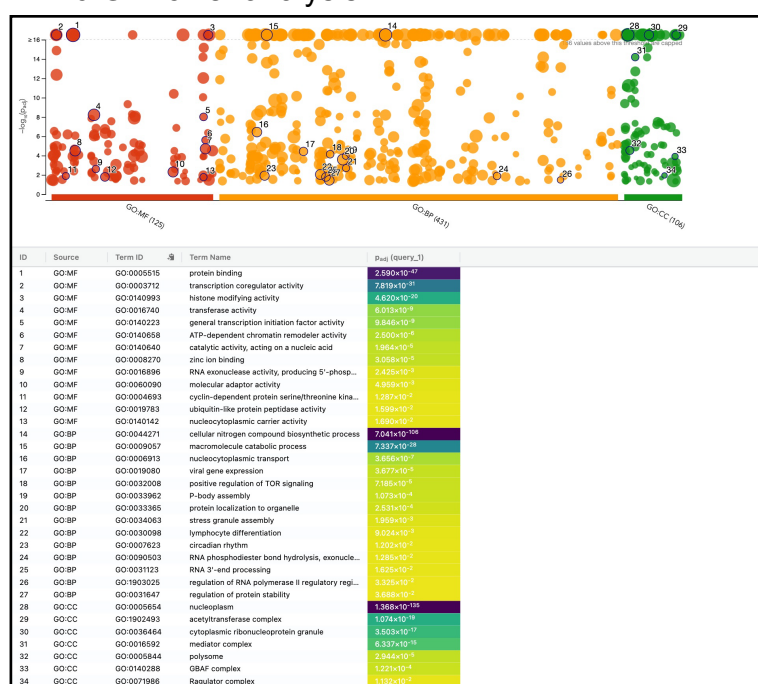


C

LAD5 G:Profiler analysis

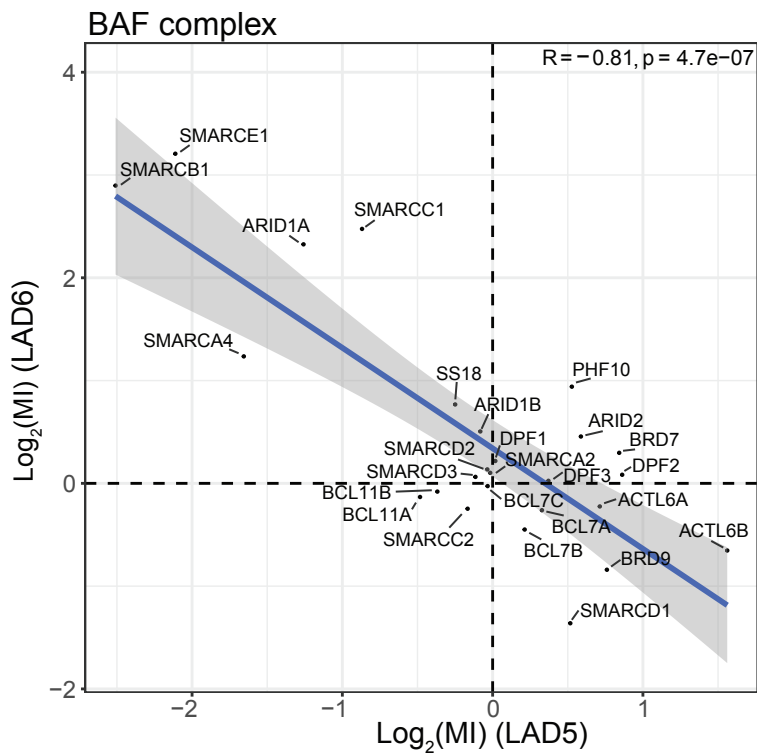


LAD6 G:Profiler analysis

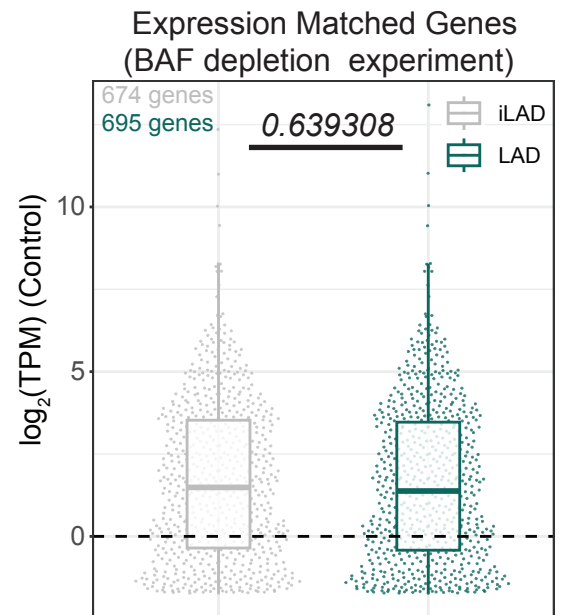


Appendix Figure S2. A) Sorting strategy for the screen. Gene-trapped cells were divided in two bins according to mCherry fluorescent intensity (subgroup A and B, top panel). Each subgroup was further sorted according to GFP intensity (HIGH vs LOW, bottom panels). FSC-A is forward scattering area used for gating. B) Correlation plot between mutation indexes for significant hits ($fcpv < 0.05$) for LOW1/HIGH1 comparison vs LOW2/HIGH2 comparison (see also figure 1C) for GFP reporters. The blue line represents a linear model, Pearson correlation and P values are shown in the plot. B) G:Profiler analysis (Kolberg et al., 2023) for regulators of GFP reporters for LAD5 and LAD6 cell lines.

A



B



Appendix Figure S3 A) Correlation of LAD5 and LAD6 MIs from the screen for all subunits composing the BAF complex (cBAF and pBAF). The blue line represents a fitted linear model; Pearson correlation and P values are shown in the plots B) Gene expression levels for expression-matched LAD and iLAD genes in the BAF depletion experiments. Data are from Schick et al. 2019, and are the results from three biological replicates.

A*Jaeger et al Nat gen 2020*

<i>degron</i>	MED1	MED6	MED10	MED12	MED14	MED26	MED28	MED31
up	0	78	12	0	67	0	0	0
down	3232	0	70	1	3046	0	6	0

Appendix Table S1. A) Number of differentially expressed genes following acute depletion of 8 different Mediator subunits (Jaeger et al., 2020)