

## Supplementary information

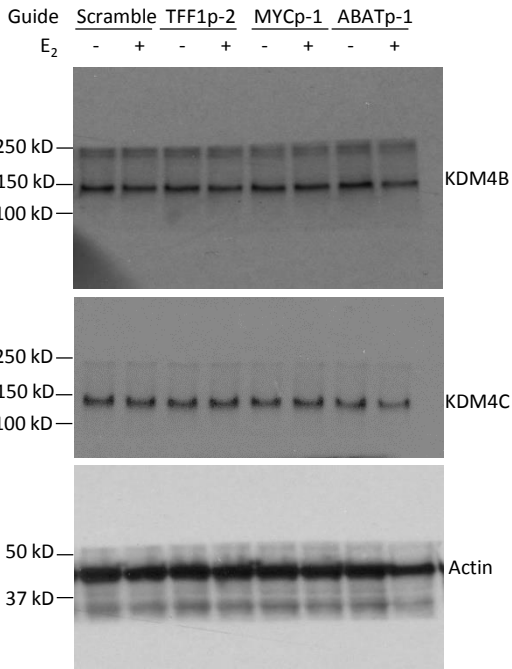
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# Shape of promoter antisense RNAs regulates ligand-induced transcription activation

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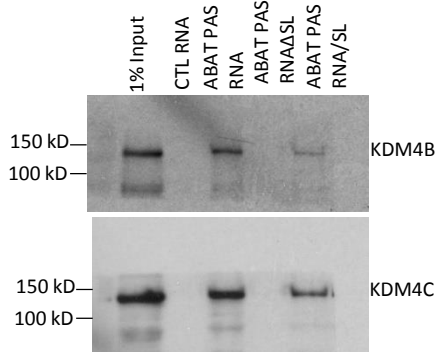
In the format provided by the authors and unedited

Extended Data Fig. 7i



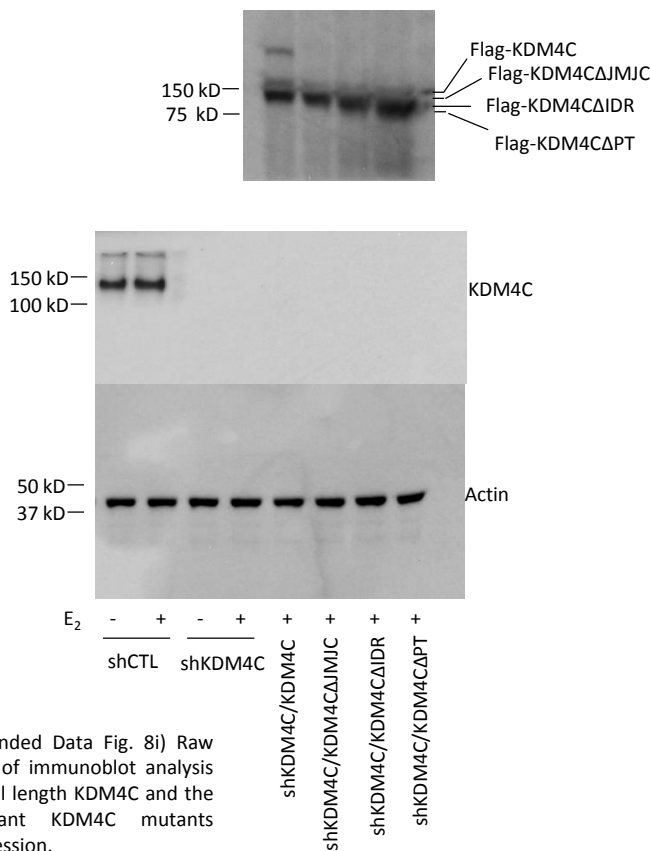
(Extended Data Fig. 7i) Raw data of immunoblot analysis showing no effect of TFF1pasRNA, MYCpasRNA and ABATpasRNA knockdown on KDM4B and KDM4C expression following E2 treatment.

Extended Data Fig. 7j



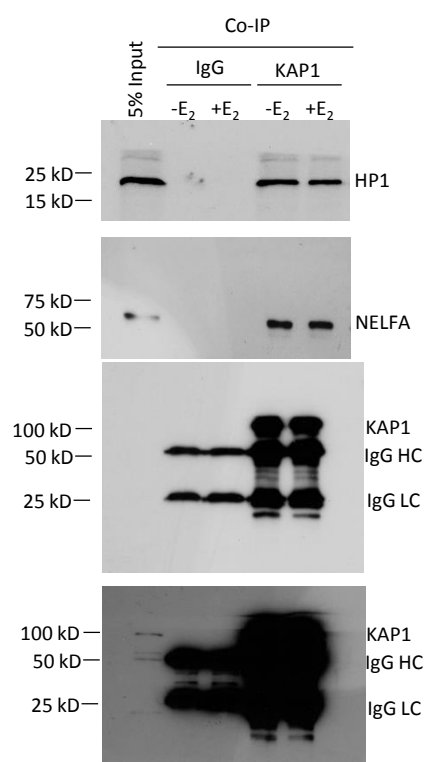
(Extended Data Fig. 7j) Cells lysates as described in Fig. 2m were subjected to co-immunoprecipitation with anti-Flag antibody (for flag-dCas9) followed by immunoblot analysis with antibodies as indicated. Raw data of KDM4B and KDM4C immunoblot provided.

Extended Data Fig. 8i



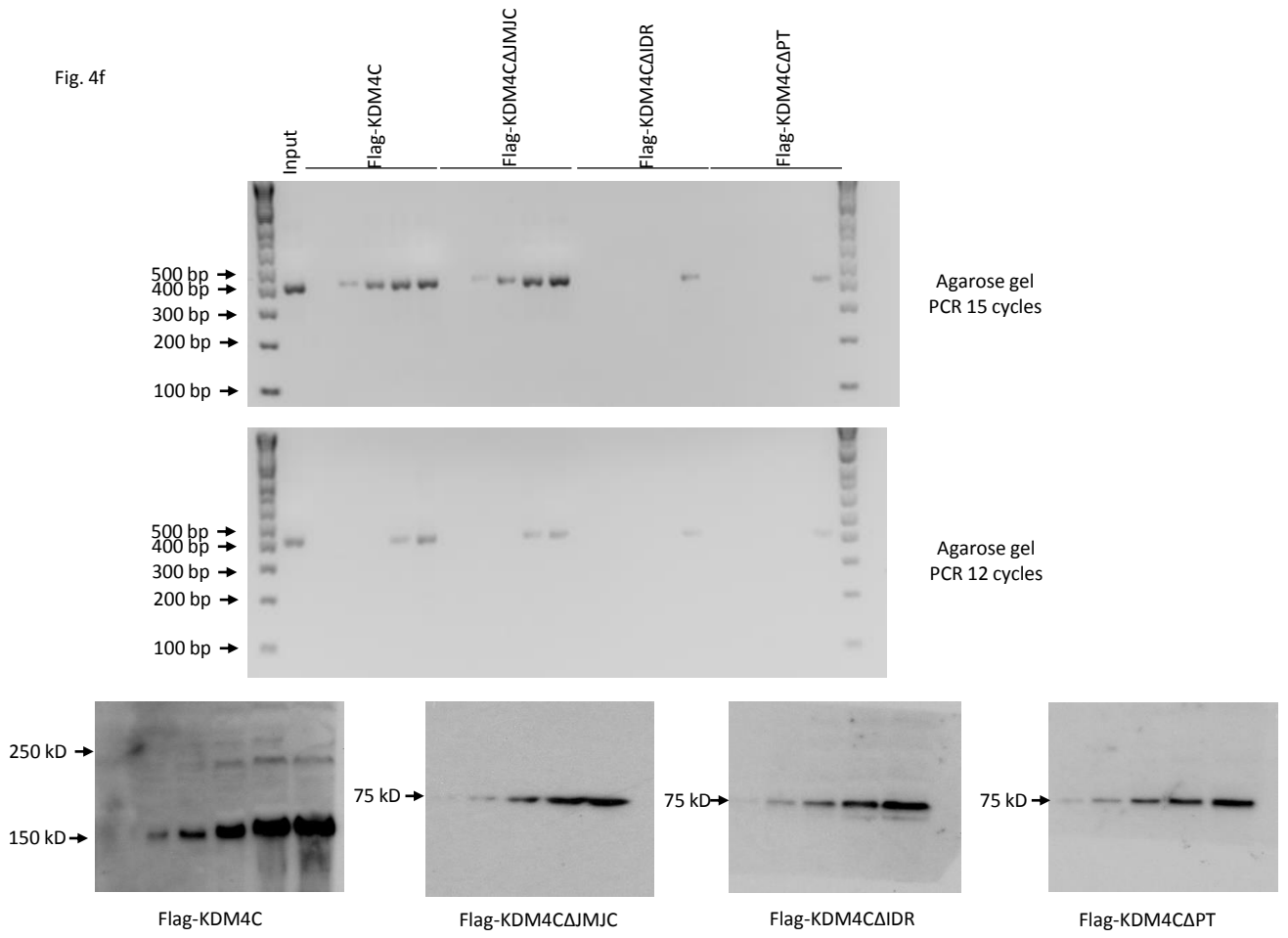
(Extended Data Fig. 8i) Raw data of immunoblot analysis of full length KDM4C and the relevant KDM4C mutants expression.

Extended Data Fig. 11b



(Extended Data Fig. 11b) Raw data of Co-IP result showing interaction between HP1 and KAP1.

Fig. 4f



(Fig.4f) Raw data of in vitro IP-RT-PCR data showing required IDR of KDM4C for interaction with ABAT PAS RNA.