

Elements at the 5' end of *Xist* harbor SPEN-independent transcriptional antiterminator activity

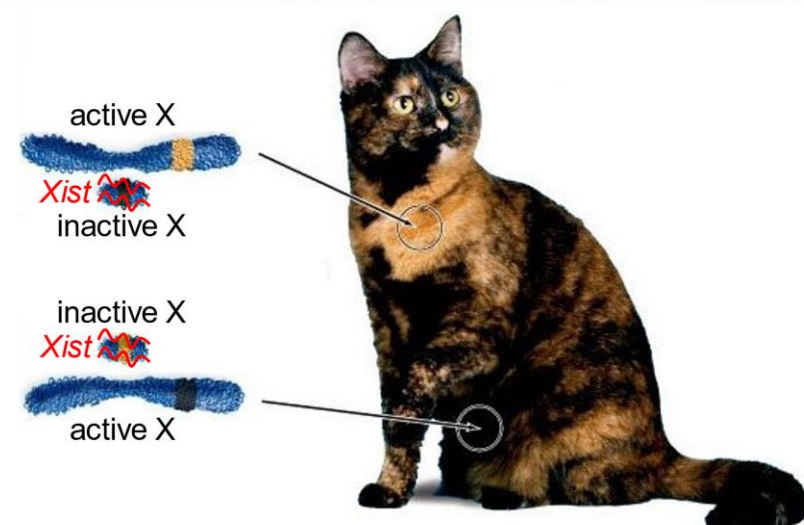
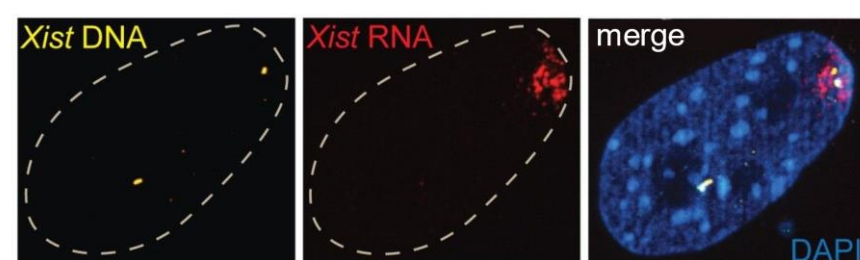
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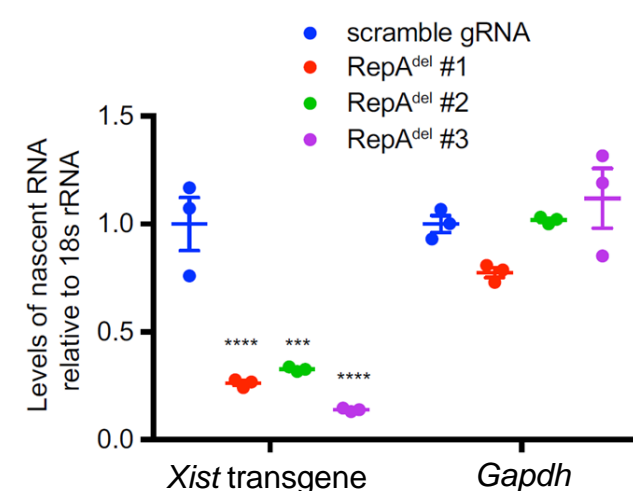
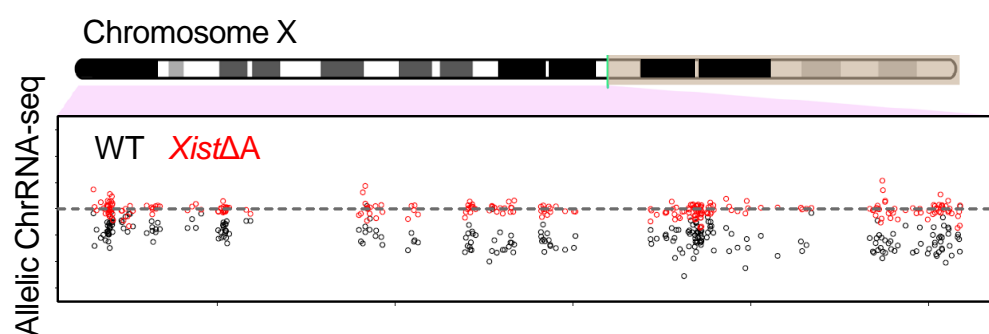
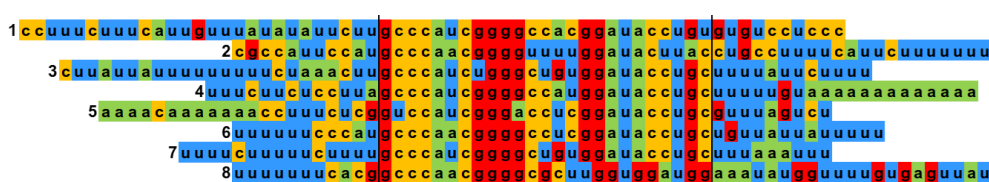
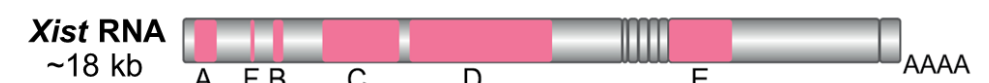


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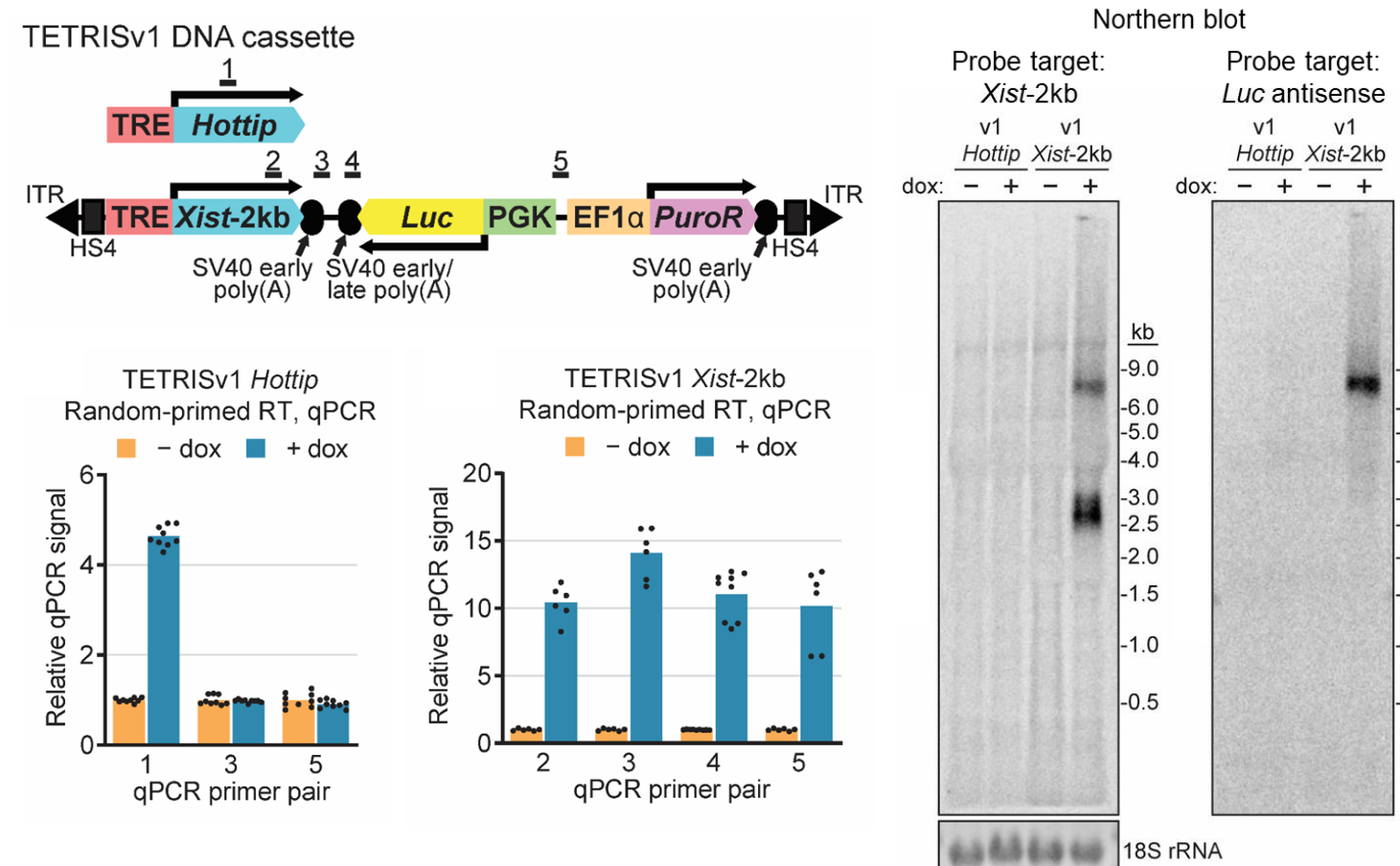
The lncRNA *Xist* silences an entire X chromosome



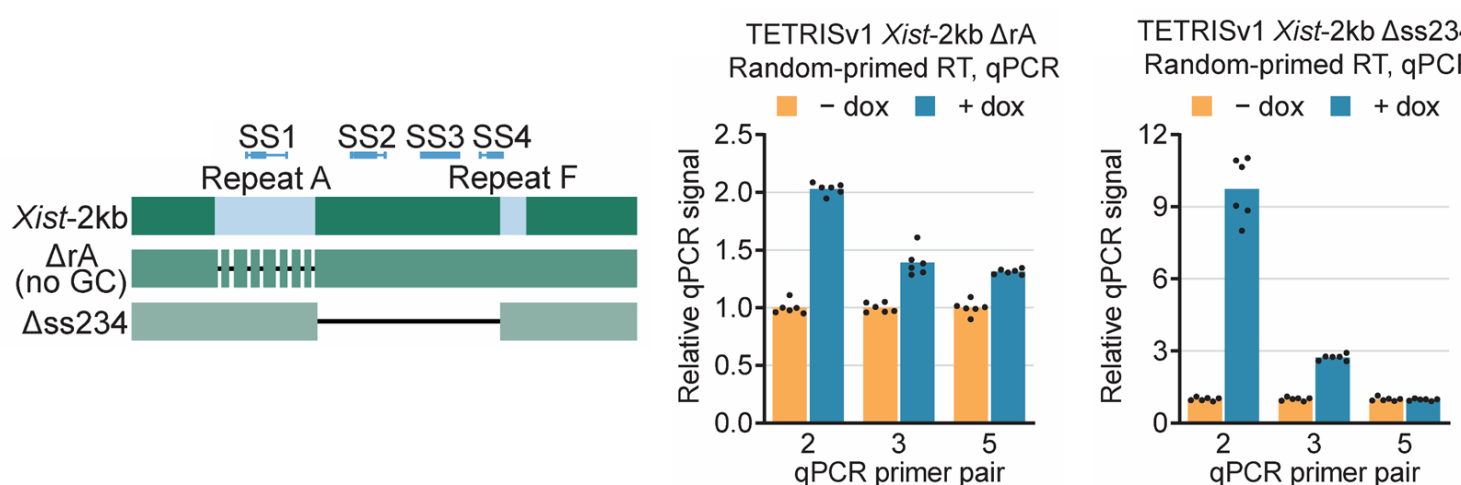
Xist's Repeat A domain is required for gene silencing but also for the production of *Xist* itself. How does Repeat A perform both essential roles?



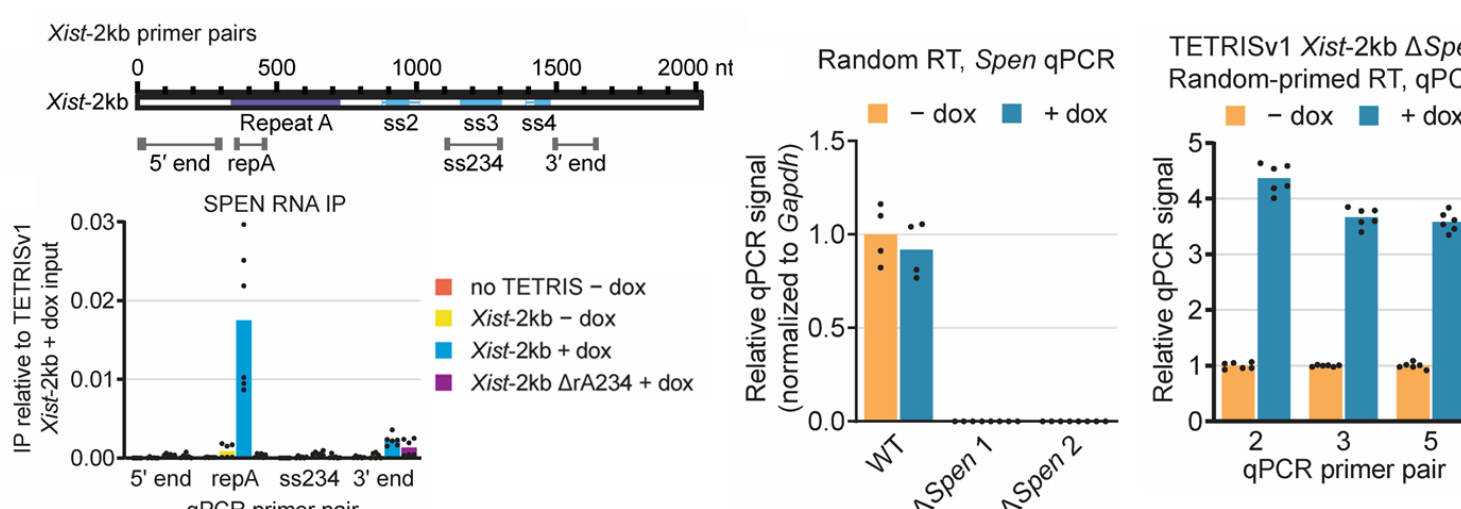
In TETRIS, transcription of a Repeat-A-containing *Xist* fragment (*Xist*-2kb) unexpectedly reads through multiple polyadenylation sequences



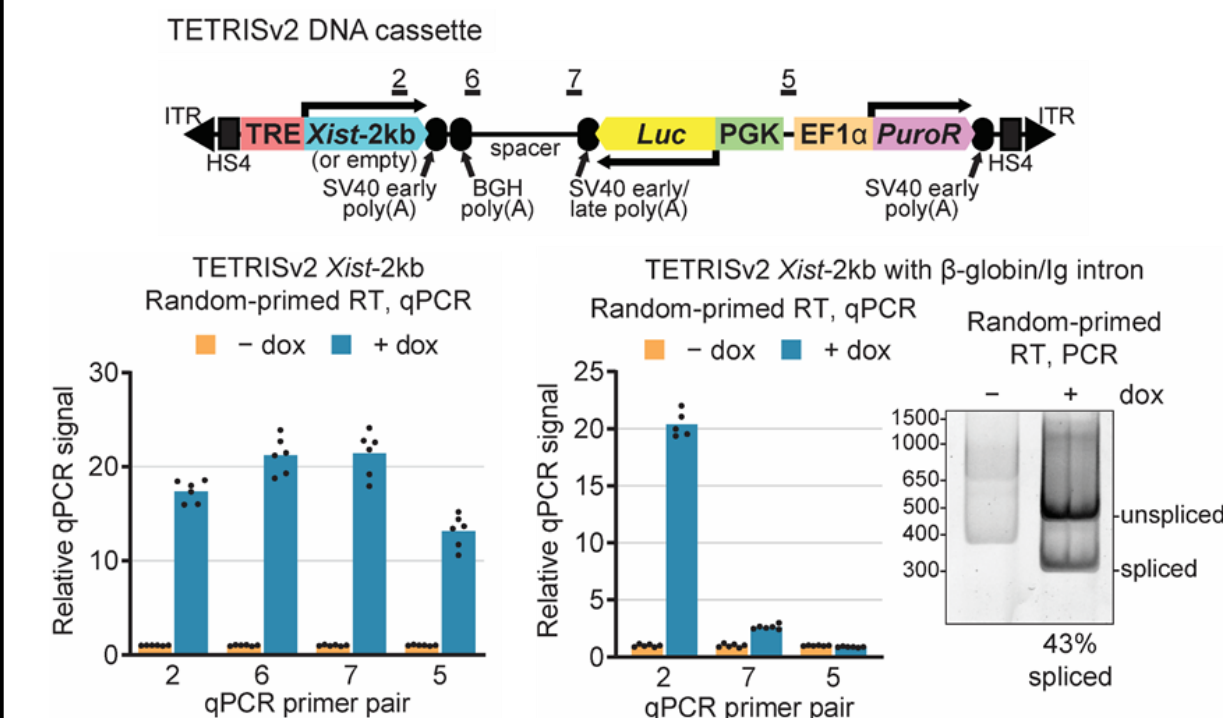
Transcriptional readthrough by *Xist*-2kb requires Repeat A and a conserved, stably structured sequence immediately downstream



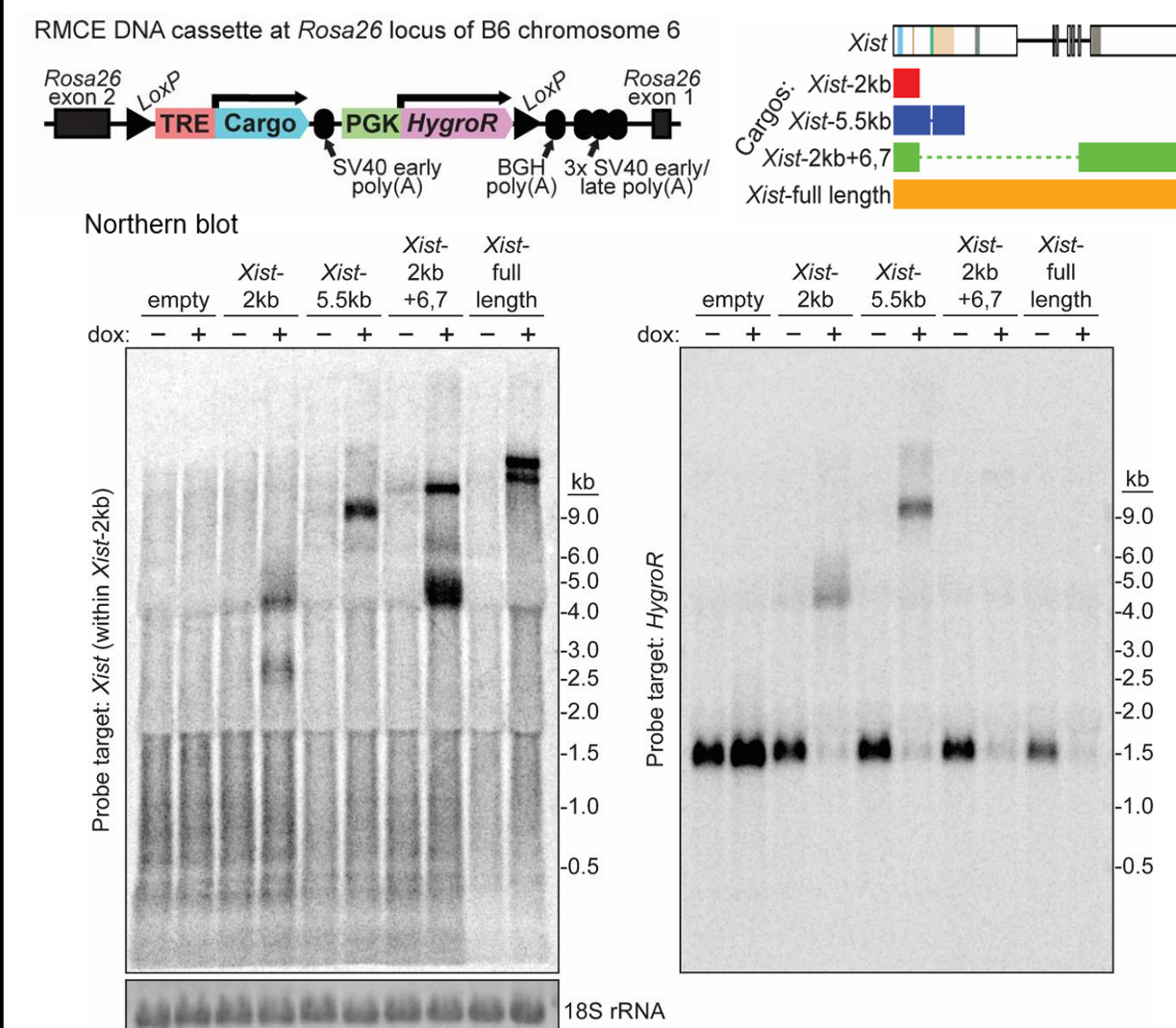
Xist-2kb binds SPEN, but SPEN is not required for readthrough transcription



Efficient splicing inhibits *Xist*-2kb readthrough transcription



As single-copy transgenes, 5' fragments of *Xist* cause transcriptional readthrough beyond their polyadenylation sites



Acknowledgements

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References

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Trotman et al. (2020) *NAR*