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PRINT PAPER

LETTER

Outgrowth of single oncogene-expressing cells from suppressive epithelial environments

David F. Lopez & Mark S. Singer

Transcription in a single oncogene promoter is a regulated but not a constitutive process. We have used a single-cell transcriptome approach to study the transcriptional activity of a single oncogene promoter in a suppressive epithelial environment. We show that the transcriptional activity of a single oncogene promoter is regulated by the environment and that this regulation is mediated by the interaction of the promoter with the environment. We show that the transcriptional activity of a single oncogene promoter is regulated by the environment and that this regulation is mediated by the interaction of the promoter with the environment. We show that the transcriptional activity of a single oncogene promoter is regulated by the environment and that this regulation is mediated by the interaction of the promoter with the environment.

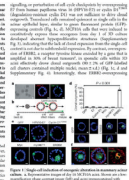


Figure 1 Schematic of the experimental setup for single-cell transcriptome analysis. A single cell is cultured in a suppressive epithelial environment. The transcriptional activity of a single oncogene promoter is measured. The results show that the transcriptional activity is regulated by the environment.

LETTER

Characterization of the transcriptional activity of a single oncogene promoter in a suppressive epithelial environment

David F. Lopez & Mark S. Singer

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Figure 2 Bar chart showing the transcriptional activity of a single oncogene promoter in a suppressive epithelial environment. The y-axis represents the transcriptional activity, and the x-axis represents the different conditions. The results show that the transcriptional activity is significantly higher in the suppressive environment compared to the control.

Key features:

- Includes main text and figures/tables/boxes plus references.
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METHODS

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EXTENDED DATA

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Supplementary Figure 1: Schematic of the experimental setup for single-cell transcriptome analysis. A single cell is cultured in a suppressive epithelial environment. The transcriptional activity of a single oncogene promoter is measured. The results show that the transcriptional activity is regulated by the environment.

EXTENDED DATA

Supplementary Figure 2: Bar chart showing the transcriptional activity of a single oncogene promoter in a suppressive epithelial environment. The y-axis represents the transcriptional activity, and the x-axis represents the different conditions. The results show that the transcriptional activity is significantly higher in the suppressive environment compared to the control.

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SUPPLEMENTARY INFORMATION

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Supplementary text

DIS-1 does not interfere with the distribution of axons and the ability of its response machinery

While it is essential that DIS-1 interacts with axons and its response machinery to function as an axon response sensor (Fig. 10A), it is imperative that the receptor does not disrupt the ability of the axon response machinery. To address this question, we generated DIS-1 transgenic plants that were generated (Supplementary Fig. 1C) suggesting that overexpression of an AxSAA domain II does not interfere significantly with plant development. Because to detect axon changes in axon response, such as increasing axon-dependent axon growth, we generated 'holding root' and 'axonal protrusion root' at the shoot apex (Supplementary Fig. 1D). We further revealed that the behavior of the DIS-1 transgenic response line was equivalent to wild type. We conclude that DIS-1 does not interfere with the distribution of axons and the ability of its response machinery.

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Key features:

- Most Supplementary Information is supplied as a single PDF and may include supplementary discussion, notes, methods, etc. Figures should not be included in the Supplementary Information. Additional file formats include movies, spreadsheets and data sets.
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