

TFPA2A homodimer and NPM1 bind the NOP2 gene promoter

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https://reactome.org

Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

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- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467.
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- Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph data-base: Efficient access to complex pathway data. *PLoS computational biology, 14*, e1005968.

Reactome database release: 88

This document contains 1 reaction (see Table of Contents)

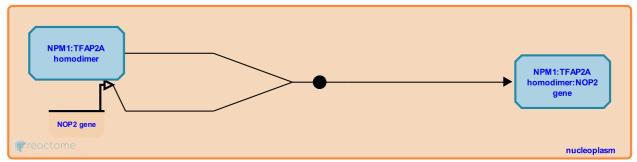
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TFPA2A homodimer and NPM1 bind the NOP2 gene promoter **→**

Stable identifier: R-HSA-8869543

Type: binding

Compartments: nucleoplasm



In response to retinoic acid treatment, TFAP2A (AP-2 alpha) homodimers in complex with NPM1 (nucleophosmin) are recruited to the AP-2 alpha response element in the promoter of the nucleolar protein NOP2 (p120) (Liu et al. 2007).

Literature references

Yung, BY., Chuang, CP., Chen, KD., Tseng, KH., Tan, BC., Yeh, CW. et al. (2007). Nucleophosmin acts as a novel AP2alpha-binding transcriptional corepressor during cell differentiation. *EMBO Rep.*, 8, 394-400.

Editions

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