# HNF1a regulates Foxa3

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# 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

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics, 18*, 142. ↗

Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics, 33*, 3461-3467. ↗

Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res, 46*, D649-D655. ↗

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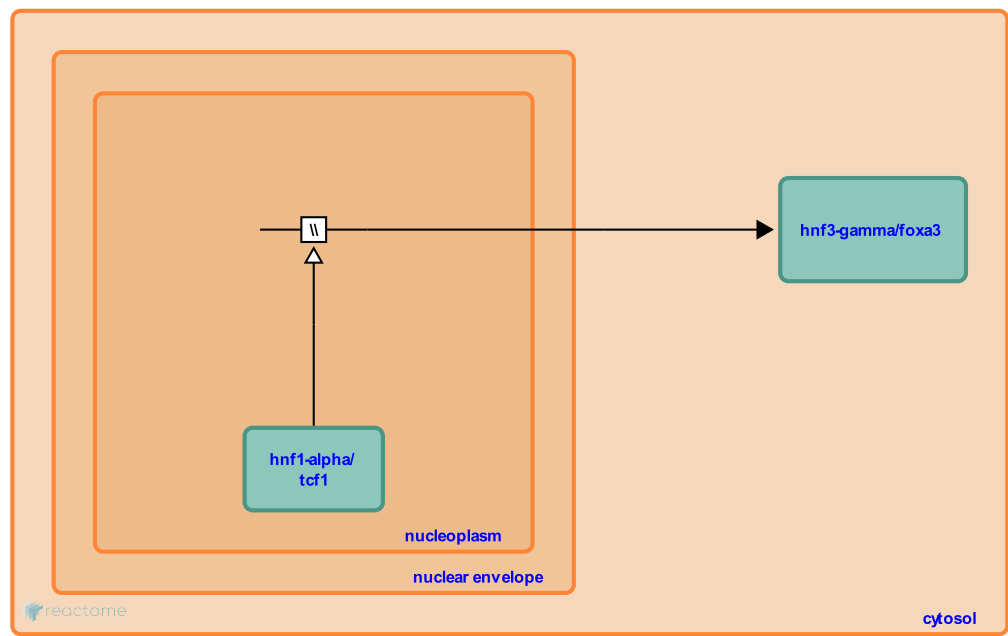
Reactome database release: 88

This document contains 1 reaction (see Table of Contents)

# HNF1a regulates Foxa3 ↗

**Stable identifier:** R-MMU-186617

**Type:** omitted

**Compartments:** nucleoplasm, cytosol



HNF1a was shown to bind a 3'-region of the Foxa3 (Hnf3g) gene by chromatin immunoprecipitation (Boj et al. 2001). The deletion in mice of an enhancer region that binds HNF1a located in the 3' region of the Foxa3 gene was shown to affect Foxa3 gene expression in liver, pancreas and gut (Hiemisch et al. 1997). Genetic evidence exists that HNF1a regulates Foxa3 in Hnf1alpha -/- mice (Boj et al. 2001).

## Literature references

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Schutz, G., Kaestner, KH., Hiemisch, H. (1997). Transcriptional regulation in endoderm development: characterization of an enhancer controlling Hnf3g expression by transgenesis and targeted mutagenesis. *EMBO J, 16*, 3995-4006. ↗

## Editions

| | | |
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| 2006-12-20 | Edited | Tello-Ruiz, MK. |
| 2008-05-13 | Reviewed | Jensen, J. |
| 2008-05-24 | Authored | Tello-Ruiz, MK., Ferrer, J. |