

NICD4 traffics to the nucleus

Haw, R., Jassal, B., Joutel, A., Orlic-Milacic, M.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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

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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. [↗](#)
- 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

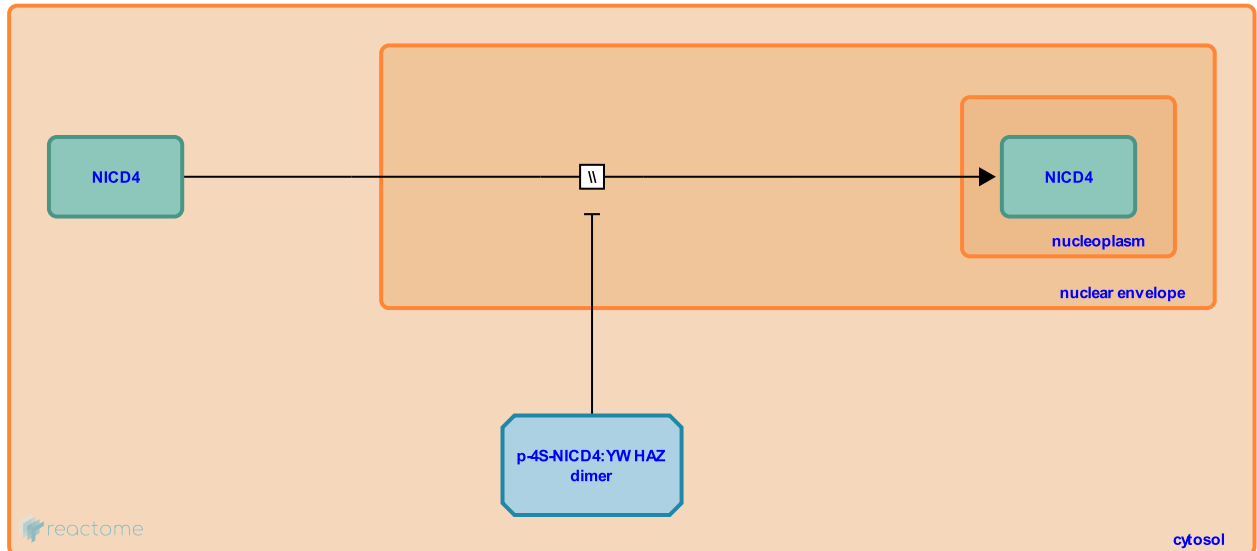
This document contains 1 reaction ([see Table of Contents](#))

NICD4 traffics to the nucleus [↗](#)

Stable identifier: R-HSA-9604308

Type: omitted

Compartments: nuclear envelope



The cytosolic NICD4 translocates to the nucleus. Trafficking of NICD4 to the nucleus is negatively regulated by binding of NICD4 to 14-3-3-zeta (YWHAZ), which happens upon NICD4 phosphorylation by activated AKT1 (Ramakrishnan et al. 2015).

Literature references

Green, AR., Davaakhuu, G., Pannuti, A., Ramakrishnan, G., Zhu, H., Chung, WC. et al. (2015). AKT and 14-3-3 regulate Notch4 nuclear localization. *Sci Rep*, 5, 8782. [↗](#)

Editions

2004-12-15	Authored	Jassal, B.
2004-12-15	Reviewed	Joutel, A.
2018-04-05	Authored, Revised	Orlic-Milacic, M.
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