

CORIN(802-1042) hydrolyses NPPA to form NPPA(124-151)

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19/05/2024

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

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. [↗](#)

Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

Reactome database release: 88

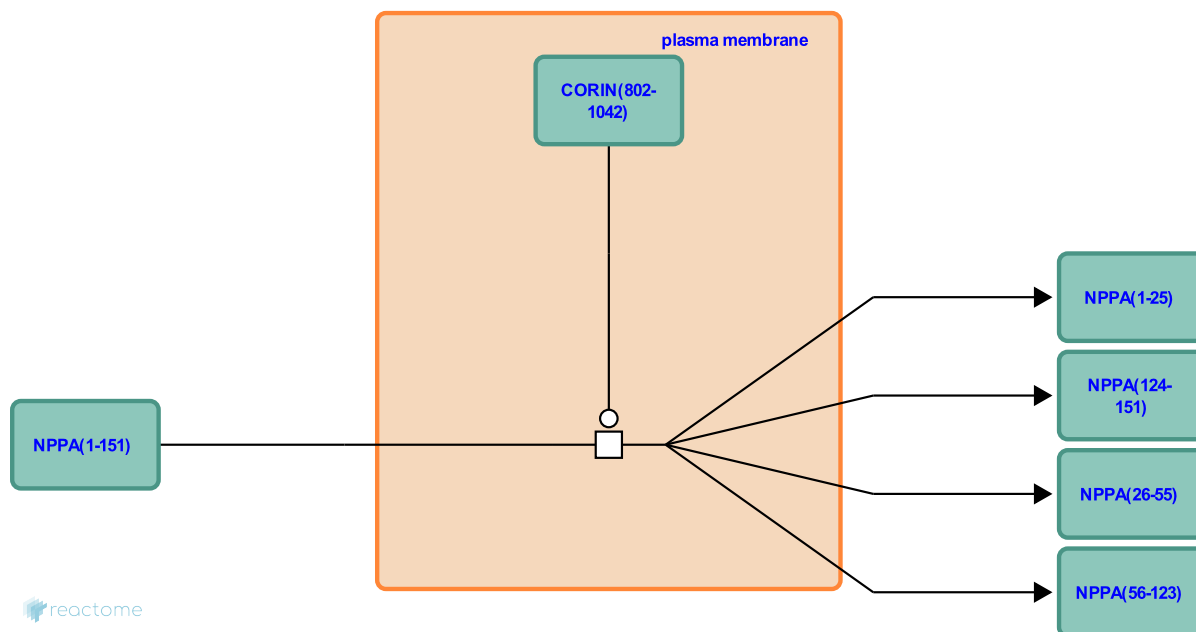
This document contains 1 reaction ([see Table of Contents](#))

CORIN(802-1042) hydrolyses NPPA to form NPPA(124-151) ↗

Stable identifier: R-HSA-5578783

Type: transition

Compartments: plasma membrane, extracellular region



Atrial natriuretic factor (NPPA(124-151) aka ANF) is a cardiac hormone essential for the regulation of blood pressure and promoting natriuresis, diuresis and vasodilation. In cardiac myocytes, NPPA is synthesised as an inactive precursor, pro-NPPA, that is converted to the biologically-active form by cleavage. Atrial natriuretic peptide-converting enzyme (CORIN) is the serine-type endopeptidase involved in NPPA processing. It is itself cleaved into 5 chains, with CORIN(802-1042) being the activated protease fragment (Yan et al. 2000, Knappe et al. 2003, Liao et al. 2007).

Literature references

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Editions

2014-06-02	Authored, Edited	Jassal, B.
2015-11-09	Reviewed	Colotti, G.