

CDK1 phosphorylates lamins and facilitates depolymerization of lamin filaments

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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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Reactome database release: 88

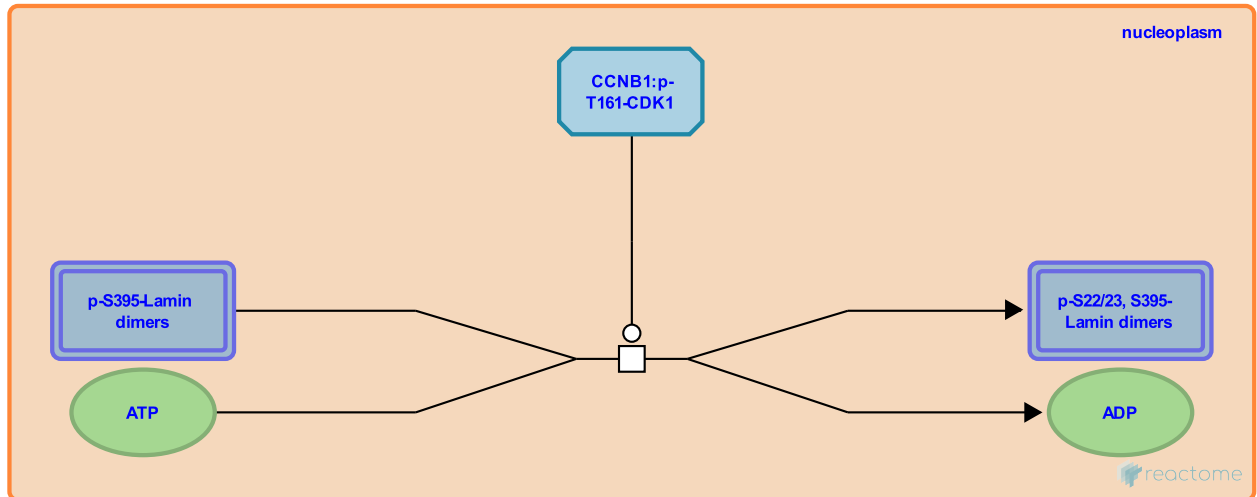
This document contains 1 reaction ([see Table of Contents](#))

CDK1 phosphorylates lamins and facilitates depolymerization of lamin filaments [↗](#)

Stable identifier: R-HSA-5244669

Type: transition

Compartments: nucleoplasm



Phosphorylation of the N-termini of lamins by CDK1 (serine S23 of lamin B, serin S22 of lamin A and C) probably happens consequentially with phosphorylation of C-termini of lamins by PKC, and contributes to the depolymerization of lamin filaments and solubilization of the nuclear lamina (Ward and Kirschner 1990, Peter et al. 1990, Heald and McKeon 1990, Mall et al. 2012).

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