

# Dephosphorylation of Cyclin E:Cdk2 complexes by Cdc25A

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03/05/2024

## 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. [↗](#)
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- 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

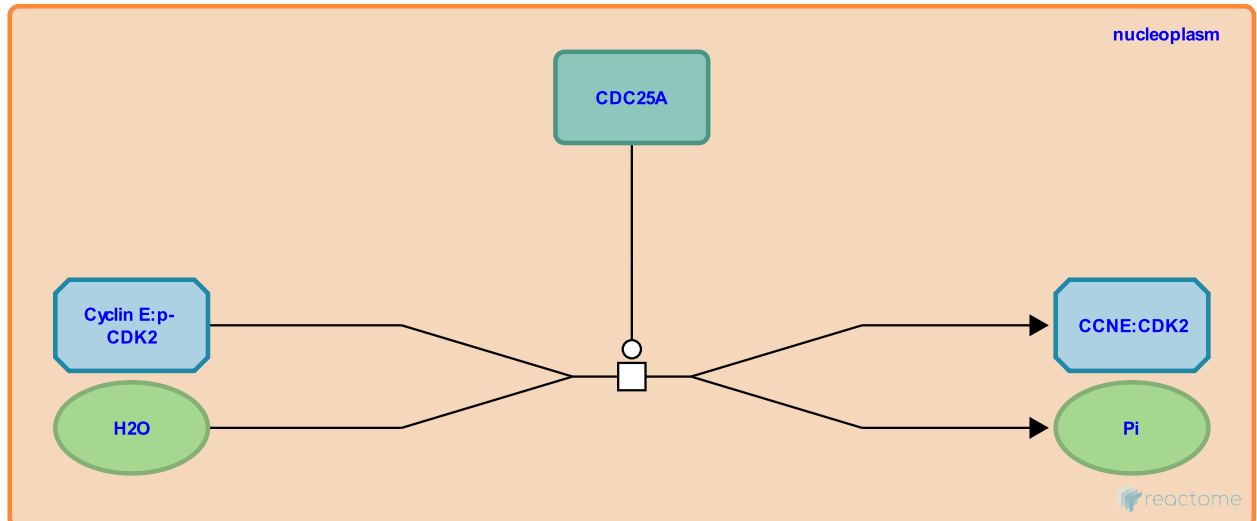
This document contains 1 reaction ([see Table of Contents](#))

## Dephosphorylation of Cyclin E:Cdk2 complexes by Cdc25A [↗](#)

**Stable identifier:** R-HSA-69199

**Type:** transition

**Compartments:** nucleoplasm



Cdc25A dephosphorylates Cdk2 and activates cyclin E-Cdk2 and cyclin A-Cdk2 kinases (Blomberg and Hoffmann, 1999).

### Literature references

Hoffmann, I., Blomberg, I. (1999). Ectopic expression of Cdc25A accelerates the G(1)/S transition and leads to premature activation of cyclin E- and cyclin A-dependent kinases. *Mol Cell Biol*, 19, 6183-94. [↗](#)

### Editions

2003-06-12	Authored	Joshi-Tope, G.
2003-09-10	Edited	Matthews, L.
2006-10-10	Revised	Matthews, L.
2018-07-10	Reviewed	Manfredi, JJ.