

# Cytosolic PP2A dephosphorylates phosphorylated PER complexed with DCO

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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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- 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

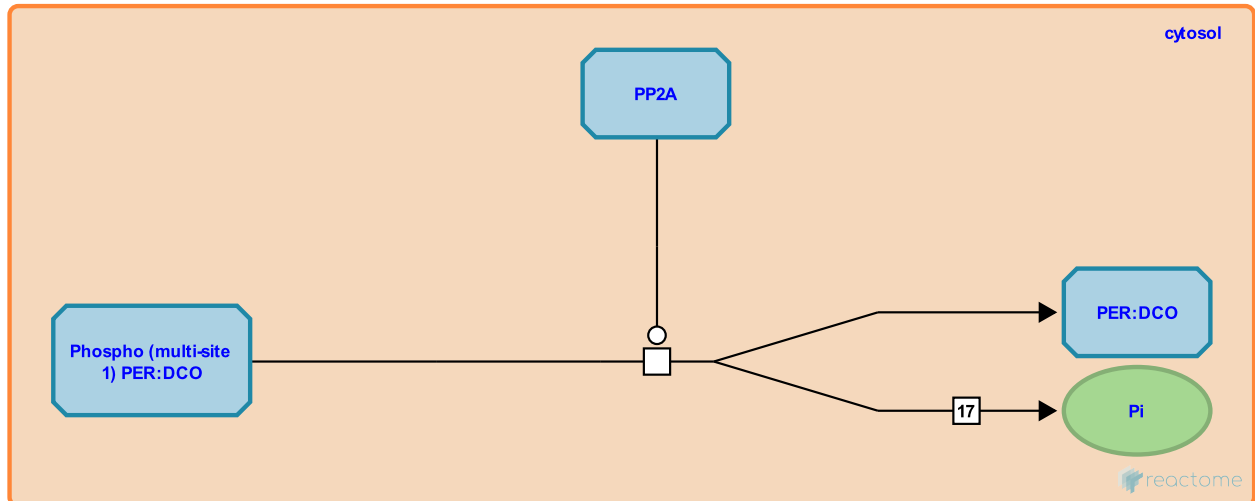
This document contains 1 reaction ([see Table of Contents](#))

## Cytosolic PP2A dephosphorylates phosphorylated PER complexed with DCO [↗](#)

**Stable identifier:** R-DME-432556

**Type:** transition

**Compartments:** cytosol



The protein phosphatase PP2A, formed of PP2A-29B:Microtubule star (MTS):Twins (TWS), helps stabilise hyperphosphorylated Period (PER), within the PER:DCO complex, by dephosphorylating it and so prevent it from degradation. PP2A likely dephosphorylates the site phosphorylated by Casein kinase Iepsilon orthologue, Discs Overgrown (DCO) as it stabilises PER.

### Literature references

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### Editions

2009-08-13	Authored	Williams, MG.
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