PPP4C:PPP4R2 dephosphorylates RPA2

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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


Reactome database release: 83

This document contains 1 reaction (see Table of Contents)
**PPP4C:PPP4R2 dephosphorylates RPA2**

**Stable identifier:** R-HSA-5687758

**Type:** transition

**Compartments:** nucleoplasm

The protein serine/threonine phosphatase complex composed of a catalytic subunit PPP4C (PP4C) and a regulatory subunit PPP4R2 (PP4R2) dephosphorylates serine S33 of the RPA2 subunit of the RPA heterotrimer. By regulating the availability of unphosphorylated RPA2, PPP4C:PPP4R2 phosphatase regulates the progression of the homologous recombination repair of DNA double-strand breaks and the duration of ATR checkpoint signaling (Lee et al. 2010).

**Literature references**


**Editions**

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