The polymerase component of DNA polymerase alpha:primase synthesizes a 20-nucleotide primer on the G strand of the telomere

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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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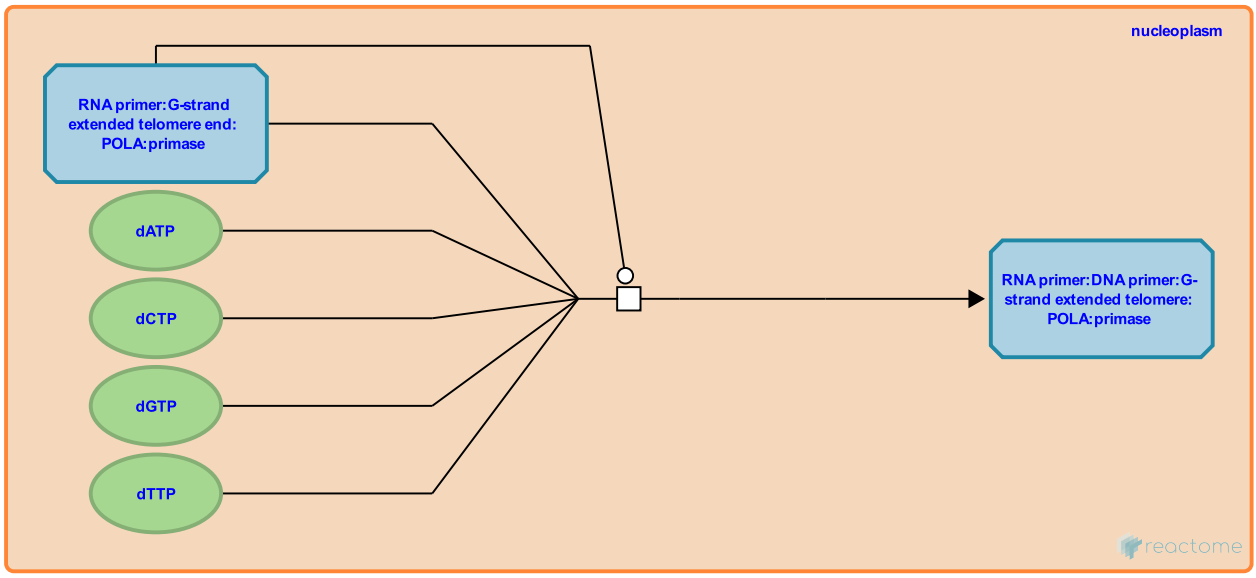
Stable identifier: R-HSA-174427

Type: transition

Compartments: nucleoplasm



The complementary C-strand at telomeres is synthesized by the polymerase alpha:primase complex using conventional RNA priming (Nakamura et al. 2005, Dai et al. 2010). This process is regulated by the CST complex (Dai et al. 2010, Feng et al. 2017, Feng et al. 2018) and CDK1 (Dai et al. 2010, Dai et al. 2012).

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Editions

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