The primase component of DNA polymerase:primase synthesizes a 6-10 nucleotide RNA 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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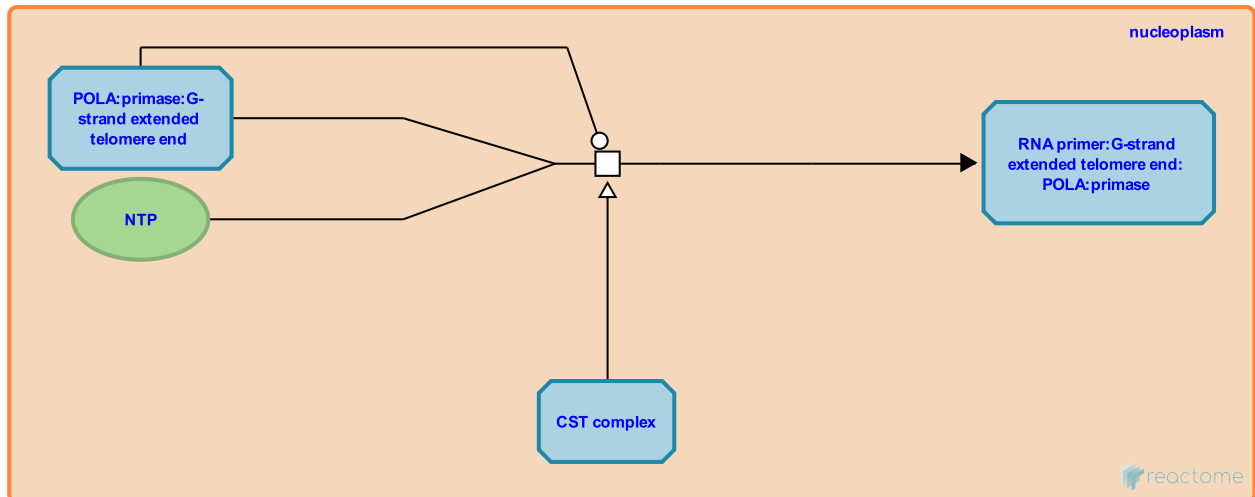
Reactome database release: 88

This document contains 1 reaction (see Table of Contents)

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Stable identifier: R-HSA-174425

Type: transition

Compartments: nucleoplasm

The complementary C-strand at telomeres is synthesized by the DNA polymerase alpha:primase complex (Nakamura et al. 2005) using conventional RNA priming (Wang et al. 1984). Interaction of the DNA polymerase alpha complex with the G-strand-bound CST complex is needed for successful priming of the C-strand (Feng et al. 2018).

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Editions

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