pPR-AP:pAP cleaves the MCP:pPR-AP:pAP Complex

Capasio, P., Gillespie, ME., Strebloow, DN.
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: 71

This document contains 1 reaction (see Table of Contents)

https://www.reactome.org
pPR-AP:pAP cleaves the MCP:pPR-AP:pAP Complex

Stable identifier: R-HCY-9636166

Type: uncertain

Compartments: nucleoplasm

Diseases: viral infectious disease

The maturational protease (PR) processes both pPR-AP and pPR in a pathway that releases PR, pAP, and AP. Although pAP is sufficient for procapsid assembly, self-cleavage of pPR-AP to PR and release of a number of pAP and pPR-AP products are required for proper DNA encapsidation and production of nucleocapsids. Precise protease cleavage steps lead to the release of major capsid protein (MCP), inactivation of the protease, and orchestration of the replacement of the scaffold in procapsids with viral DNA. PR and AP, as well as pAP forms, are completely removed from nucleocapsids into which DNA has been packaged.

Literature references


Editions

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