Maturation of HIV Virion

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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
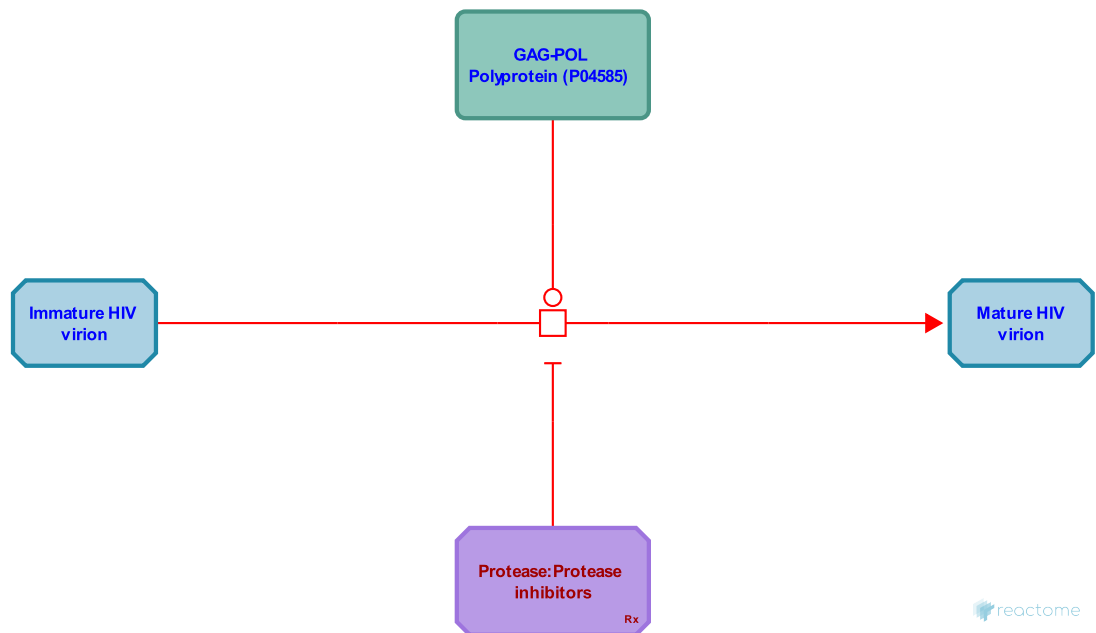
This document contains 1 reaction (see Table of Contents)

Maturation of HIV Virion ↗

Stable identifier: R-HSA-3139027

Type: transition

Compartments: extracellular region

Diseases: Human immunodeficiency virus infectious disease

The proteolytic events that cleave Gag and Gag-Pro-Pol are well characterized, but the event that triggers the protease is not well characterized. The PRGag, that is assembled in the immature virion weakly dimerizes, once PR is cleaved from the proprotein PR dimerizes and becomes an efficient protease. This assembly step may be part of the switch. Once the protease becomes active in the immature virion MA, CA, SP1, NC, SP2, P6, PR, RT, and IN are produced. This event, the production of these fragments would be the switch from immature to mature.

Literature references

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Editions

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