Processing of Capped Intron-Containing Pre-mRNA
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 4 pathways and 3 reactions (see Table of Contents)
**Processing of Capped Intron-Containing Pre-mRNA**

**Stable identifier:** R-DME-72203

**Compartments:** nucleoplasm, nuclear envelope, cytosol

**Inferred from:** Processing of Capped Intron-Containing Pre-mRNA (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: <a href='http://www.pantherdb.org/about.jsp' target='NEW'>http://www.pantherdb.org/about.jsp</a>
**Internal Methylation of mRNA**

**Location:** Processing of Capped Intron-Containing Pre-mRNA

**Stable identifier:** R-DME-72095

**Type:** transition

**Compartments:** nucleoplasm

**Inferred from:** Internal Methylation of mRNA (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output, and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[a href='/electronic_inference_compara.html' target = 'NEW']More details and caveats of the event inference in Reactome. For details on PANTHER see also: [a href='http://www.pantherdb.org/about.jsp' target='NEW']http://www.pantherdb.org/about.jsp

https://reactome.org
Formation of the Cleavage and Polyadenylation Complex

**Location:** Processing of Capped Intron-Containing Pre-mRNA

**Stable identifier:** R-DME-72231

**Type:** binding

**Compartments:** nucleoplasm

**Inferred from:** Formation of the Cleavage and Polyadenylation Complex (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

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**Formation of pre-mRNPs**

**Location:** Processing of Capped Intron-Containing Pre-mRNA

**Stable identifier:** R-DME-72103

**Type:** binding

**Compartments:** nucleoplasm

**Inferred from:** Formation of pre-mRNPs (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: [http://www.pantherdb.org/about.jsp](http://www.pantherdb.org/about.jsp)
mRNA Splicing

**Location:** Processing of Capped Intron-Containing Pre-mRNA

**Stable identifier:** R-DME-72172

**Compartments:** nucleoplasm

**Inferred from:** mRNA Splicing (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp
mRNA 3'-end processing

**Location:** Processing of Capped Intron-Containing Pre-mRNA

**Stable identifier:** R-DME-72187

**Compartments:** nucleoplasm

**Inferred from:** mRNA 3'-end processing (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species. The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

[a href='/electronic_inference_compara.html' target = 'NEW']>More details and caveats of the event inference in Reactome. For details on PANTHER see also: [a href='http://www.pantherdb.org/about.jsp' target='NEW']>http://www.pantherdb.org/about.jsp</a>
Transport of Mature Transcript to Cytoplasm

**Location:** Processing of Capped Intron-Containing Pre-mRNA

**Stable identifier:** R-DME-72202

**Compartments:** nuclear envelope, nucleoplasm, cytosol

**Inferred from:** Transport of Mature Transcript to Cytoplasm (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp
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