Aspirin ADME

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This is just an excerpt of a full-length report for this pathway. To access the complete report, please download it at the Reactome Textbook.

29/12/2022
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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

Literature references


Reactome database release: 83

This document contains 1 pathway and 5 reactions (see Table of Contents)

https://reactome.org
Aspirin ADME

Stable identifier: R-DDI-9749641

Compartments: cytosol, endoplasmic reticulum lumen, extracellular region, mitochondrial matrix

Inferred from: Aspirin ADME (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
CES2 hydrolyzes ASA-

**Location:** Aspirin ADME

**Stable identifier:** R-DDI-9749647

**Type:** transition

**Compartments:** endoplasmic reticulum lumen

**Inferred from:** CES2 hydrolyzes ASA- (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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[For details on PANTHER see also: http://www.pantherdb.org/about.jsp](http://www.pantherdb.org/about.jsp)
**CES1, CES2 hydrolyze ASA- to ST**

**Location:** Aspirin ADME

**Stable identifier:** R-DDI-9749792

**Type:** transition

**Compartments:** endoplasmic reticulum lumen

**Inferred from:** CES1, CES2 hydrolyze ASA- to ST (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><a href='http://www.pantherdb.org/about.jsp' target='NEW'>http://www.pantherdb.org/about.jsp

**Followed by:** CYP2,3 cytochromes hydroxylate ST to 2,3-DHBA, CYP2,3 cytochromes hydroxylate ST to 2,5-DHBA
CYP2,3 cytochromes hydroxylate ST to 2,3-DHBA

Location: Aspirin ADME

Stable identifier: R-DDI-9749986

Type: transition

Compartments: endoplasmic reticulum membrane, endoplasmic reticulum lumen

Inferred from: CYP2,3 cytochromes hydroxylate ST to 2,3-DHBA (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

Preceded by: CES1,CES2 hydrolyze ASA- to ST
CYP2,3 cytochromes hydroxylate ST to 2,5-DHBA

Location: Aspirin ADME

Stable identifier: R-DDI-9750016

Type: transition

Compartments: endoplasmic reticulum membrane, endoplasmic reticulum lumen

Inferred from: CYP2,3 cytochromes hydroxylate ST to 2,5-DHBA (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

Preceded by: CES1,CES2 hydrolyze ASA- to ST
ABCC2, ABCC3 transport salicylate metabolites from cytosol to extracellular region of hepatic cells

**Location:** Aspirin ADME

**Stable identifier:** R-DDI-9750656

**Type:** transition

**Compartments:** extracellular region, cytosol

**Inferred from:** ABCC2, ABCC3 transport salicylate metabolites from cytosol to extracellular region of hepatic cells (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
## Table of Contents

Introduction 1

- Aspirin ADME 2
  - CES2 hydrolyzes ASA- 3
  - CES1, CES2 hydrolyze ASA- to ST 4
  - CYP2,3 cytochromes hydroxylate ST to 2,3-DHBA 5
  - CYP2,3 cytochromes hydroxylate ST to 2,5-DHBA 6
  - ABCC2, ABCC3 transport salicylate metabolites from cytosol to extracellular region of hepatic cells 7

Table of Contents 8