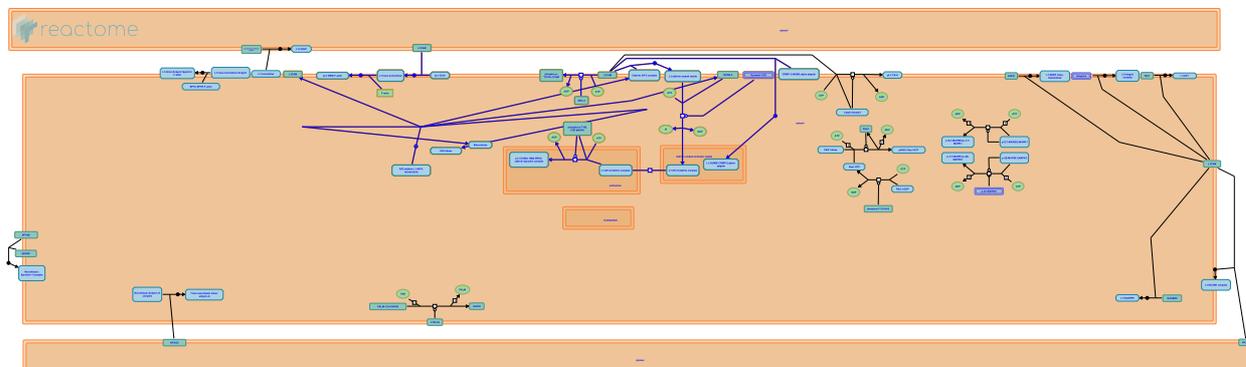


Recycling pathway of L1



European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

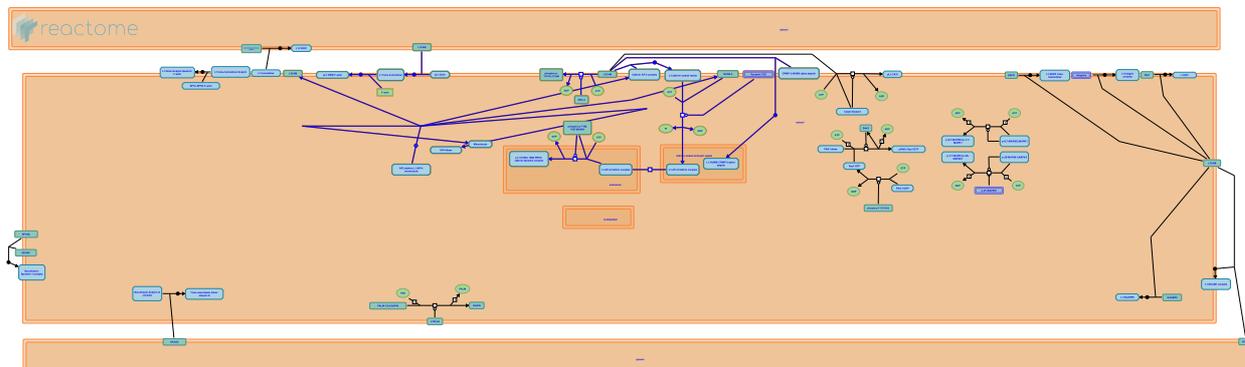
Reactome database release: 70

This document contains 1 pathway and 9 reactions ([see Table of Contents](#))

Recycling pathway of L1 ↗

Stable identifier: R-MMU-437239

Inferred from: [Recycling pathway of L1 \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Phosphorylation of L1 by SRC ↗

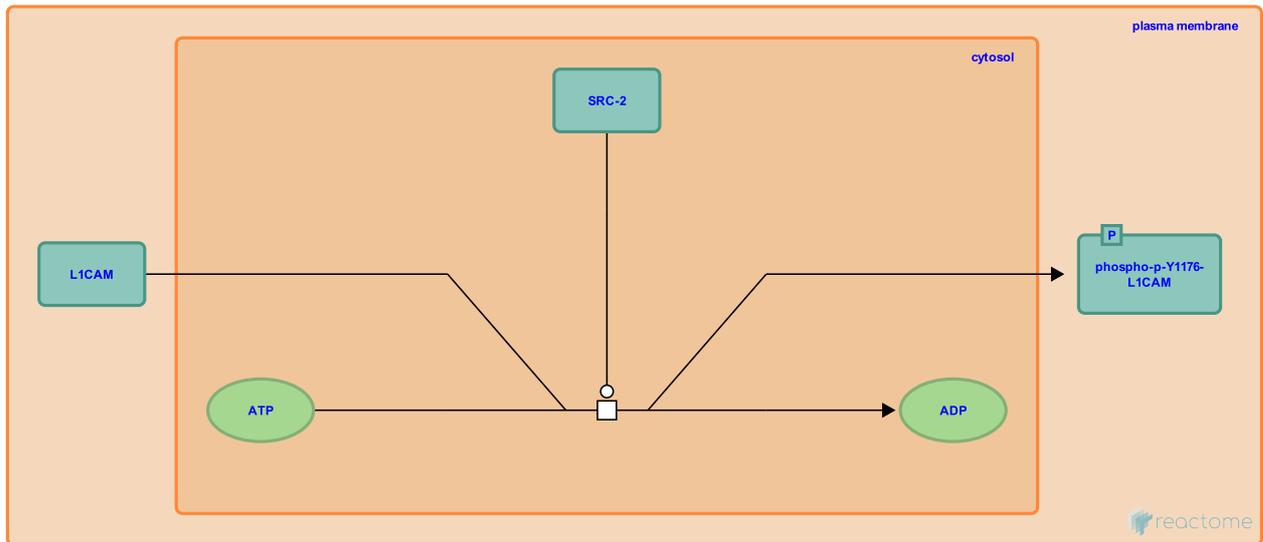
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-445084

Type: transition

Compartments: cytosol, plasma membrane

Inferred from: [Phosphorylation of L1 by SRC \(Homo sapiens\)](#)



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

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Preceded by: [Reinsertion of L1 into the plasma membrane](#)

L1 trans-homophilic interaction ↗

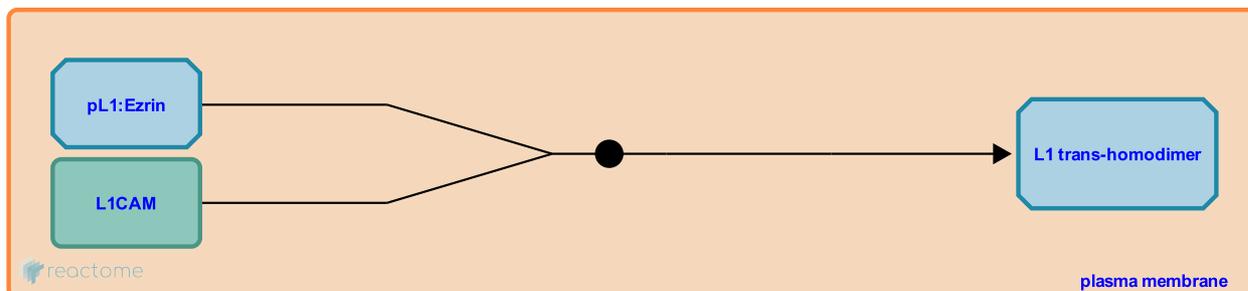
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-374680

Type: binding

Compartments: plasma membrane

Inferred from: [L1 trans-homophilic interaction \(Homo sapiens\)](#)



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Followed by: [Linkage of L1 with treadmilling F-actin](#)

Linkage of L1 with treadmilling F-actin ↗

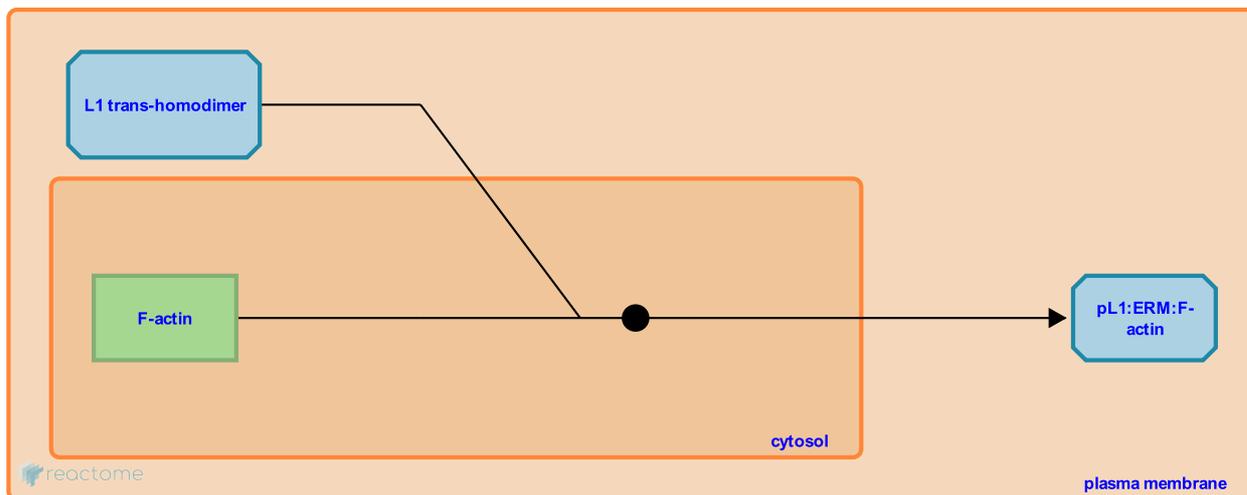
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-443779

Type: binding

Compartments: cytosol, plasma membrane

Inferred from: [Linkage of L1 with treadmilling F-actin \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [L1 trans-homophilic interaction](#)

L1 binds to AP-2 Clathrin complex ↗

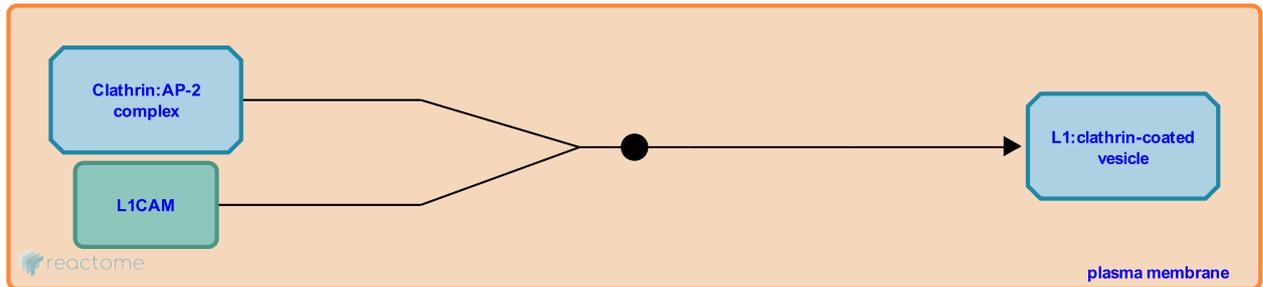
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-392748

Type: binding

Compartments: plasma membrane

Inferred from: [L1 binds to AP-2 Clathrin 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.

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

Followed by: [Formation of clathrin coated vesicle](#), [Transport of L1 into endosomes](#)

Formation of clathrin coated vesicle ↗

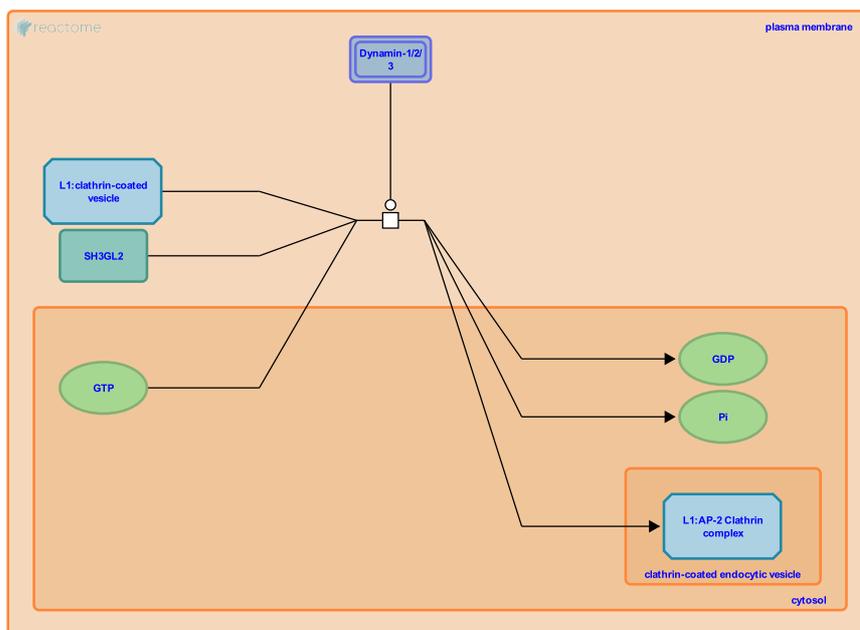
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-555065

Type: transition

Compartments: plasma membrane

Inferred from: [Formation of clathrin coated vesicle \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [L1 binds to AP-2 Clathrin complex](#)

Interaction of NUMB with L1 ↗

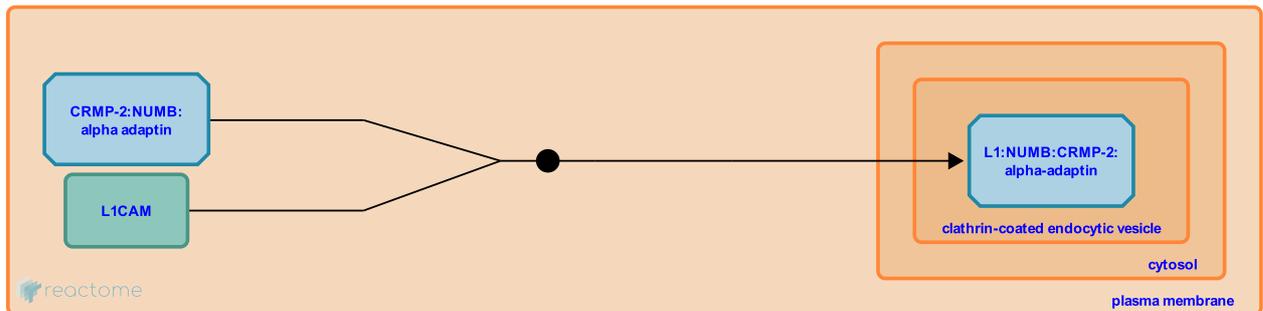
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-443783

Type: binding

Compartments: plasma membrane

Inferred from: [Interaction of NUMB with L1 \(Homo sapiens\)](#)



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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Transport of L1 into endosomes ↗

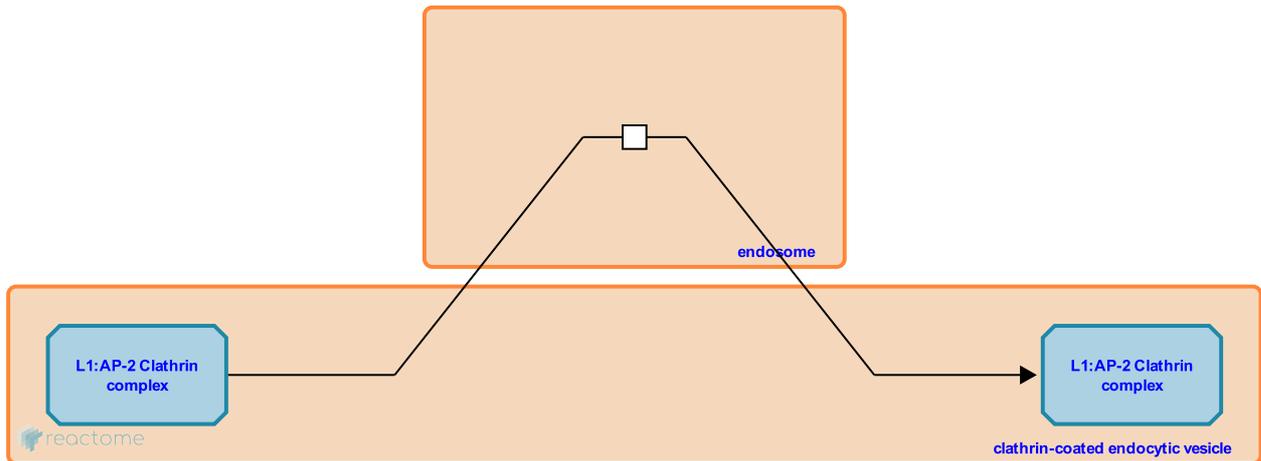
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-392749

Type: transition

Compartments: endosome

Inferred from: [Transport of L1 into endosomes \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [L1 binds to AP-2 Clathrin complex](#)

Followed by: [Phosphorylation of L1 by ERK](#)

Phosphorylation of L1 by ERK ↗

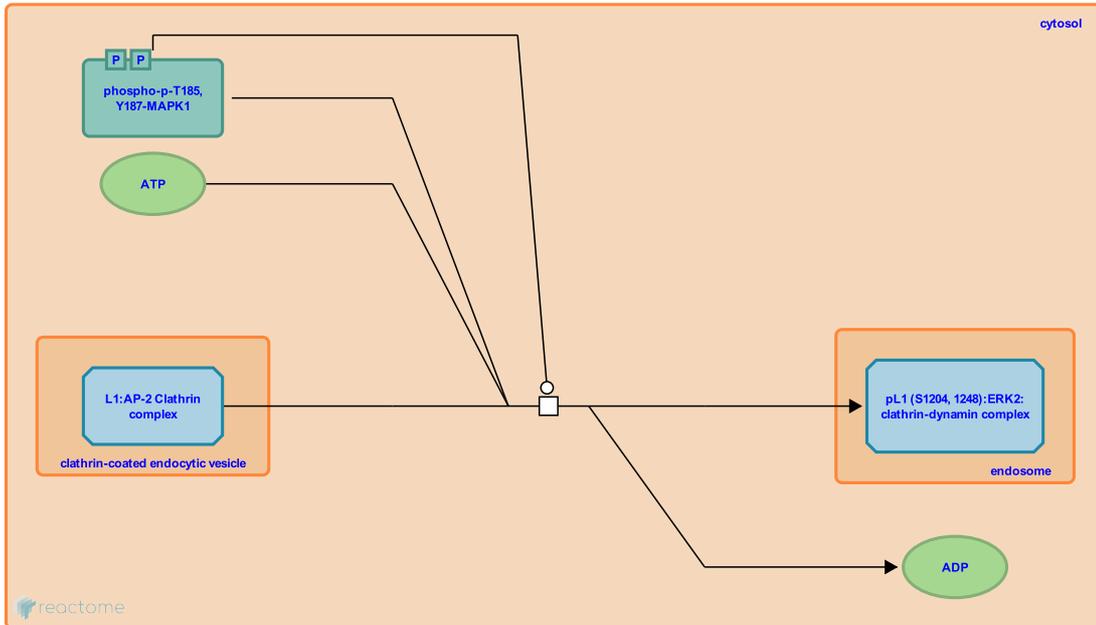
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-445079

Type: transition

Compartments: cytosol

Inferred from: [Phosphorylation of L1 by ERK \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Preceded by: [Transport of L1 into endosomes](#)

Reinsertion of L1 into the plasma membrane ↗

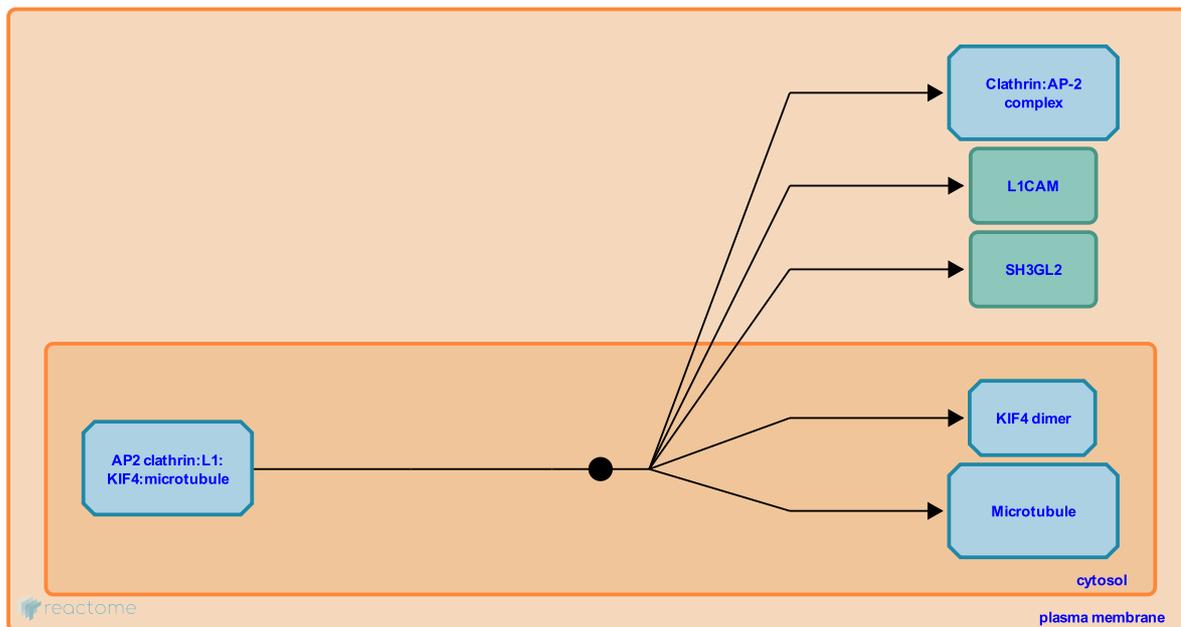
Location: [Recycling pathway of L1](#)

Stable identifier: R-MMU-445071

Type: dissociation

Compartments: cytosol, plasma membrane

Inferred from: [Reinsertion of L1 into the plasma membrane \(Homo sapiens\)](#)



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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Followed by: [Phosphorylation of L1 by SRC](#)

Table of Contents

Introduction	1
☒ Recycling pathway of L1	2
↳ Phosphorylation of L1 by SRC	3
↳ L1 trans-homophilic interaction	4
↳ Linkage of L1 with treadmilling F-actin	5
↳ L1 binds to AP-2 Clathrin complex	6
↳ Formation of clathrin coated vesicle	7
↳ Interaction of NUMB with L1	8
↳ Transport of L1 into endosomes	9
↳ Phosphorylation of L1 by ERK	10
↳ Reinsertion of L1 into the plasma membrane	11
Table of Contents	12