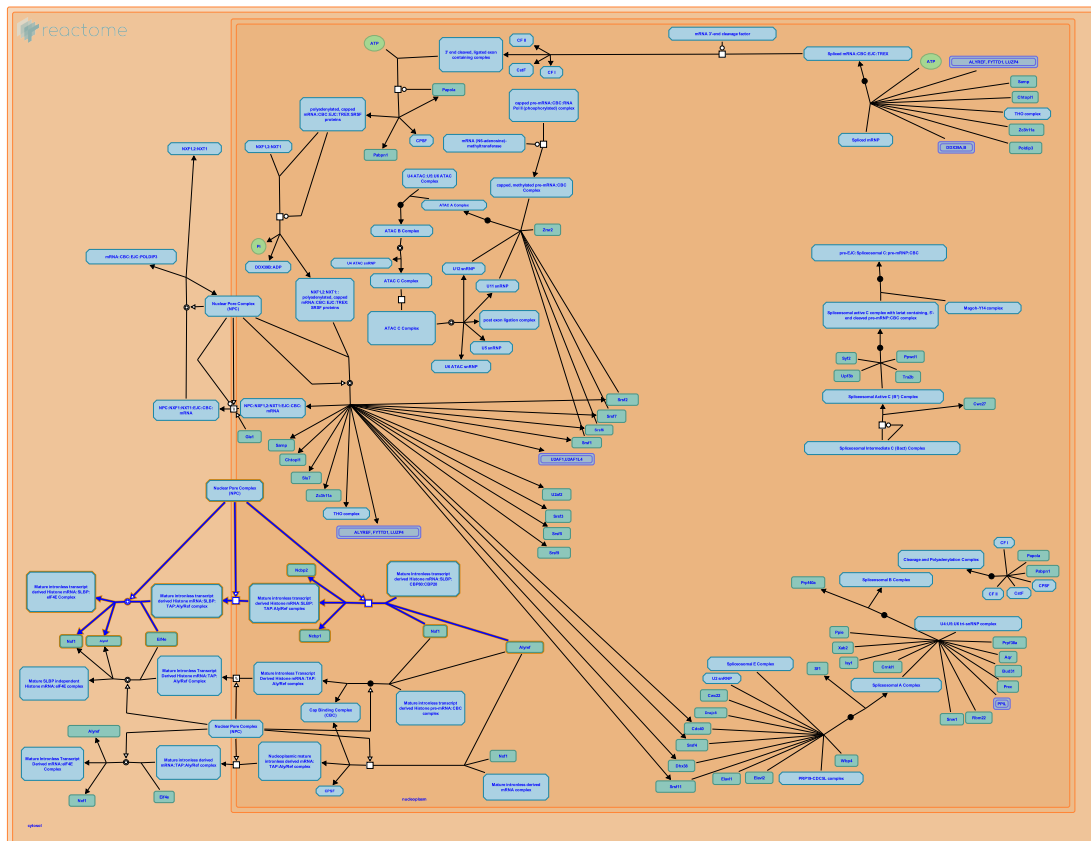


Transport of the SLBP Dependant Mature mRNA



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

The contents of this document may be freely copied and distributed in any media, provided the authors, plus the institutions, are credited, as stated under the terms of [Creative Commons Attribution 4.0 International \(CC BY 4.0\) License](https://creativecommons.org/licenses/by/4.0/). For more information see our [license](https://creativecommons.org/licenses/by/4.0/).

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

- Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142. [↗](#)
- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
- 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. [↗](#)
- 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: 73

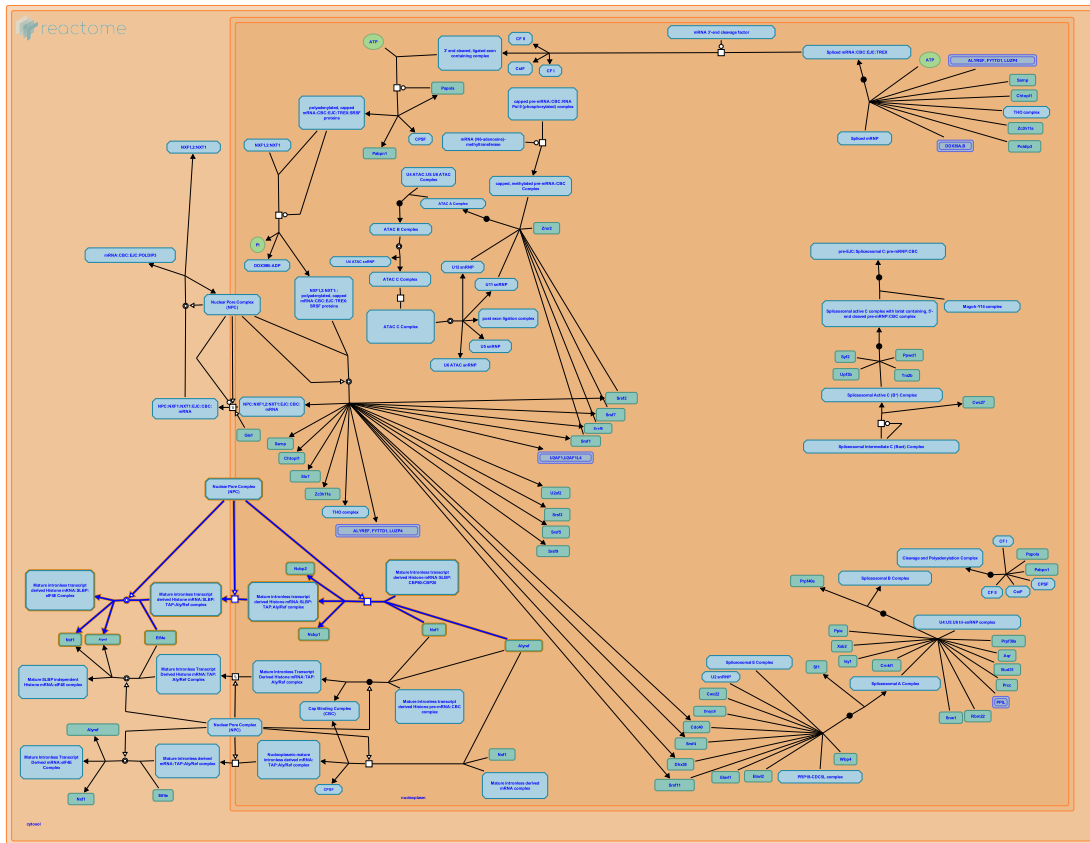
This document contains 1 pathway and 3 reactions ([see Table of Contents](#))

Transport of the SLBP Dependant Mature mRNA ↗

Stable identifier: R-RNO-159230

Compartments: nucleoplasm, nuclear envelope, cytosol

Inferred from: Transport of the SLBP Dependant Mature 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.](/electronic_inference_compara.html) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Docking of Mature Replication Dependent Histone mRNA with the NPC ↗

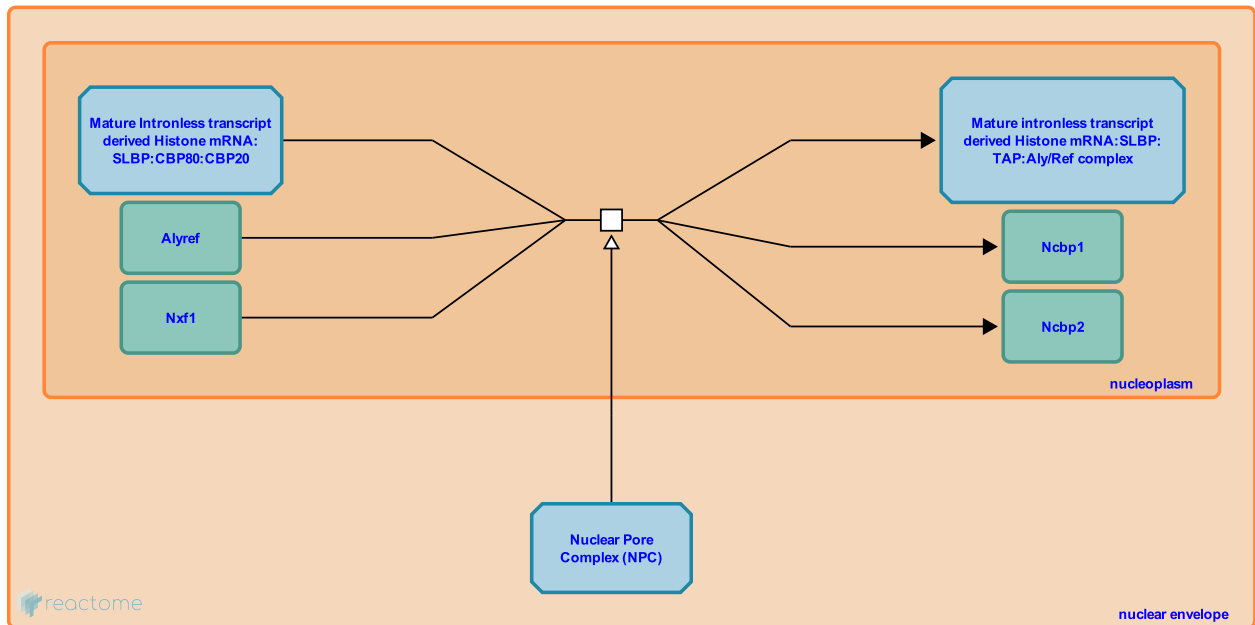
Location: [Transport of the SLBP Dependant Mature mRNA](#)

Stable identifier: R-RNO-77587

Type: transition

Compartments: nucleoplasm, nuclear envelope

Inferred from: [Docking of Mature Replication Dependent Histone mRNA with the NPC \(Homo sapiens\)](#)



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: [Transport of the Mature IntronlessTranscript Derived Histone mRNA:SLBP:TAP:Aly/Ref complex through the NPC](#)

Transport of the Mature Intronless Transcript Derived Histone mRNA:SLBP:TAP:Aly/Ref complex through the NPC ↗

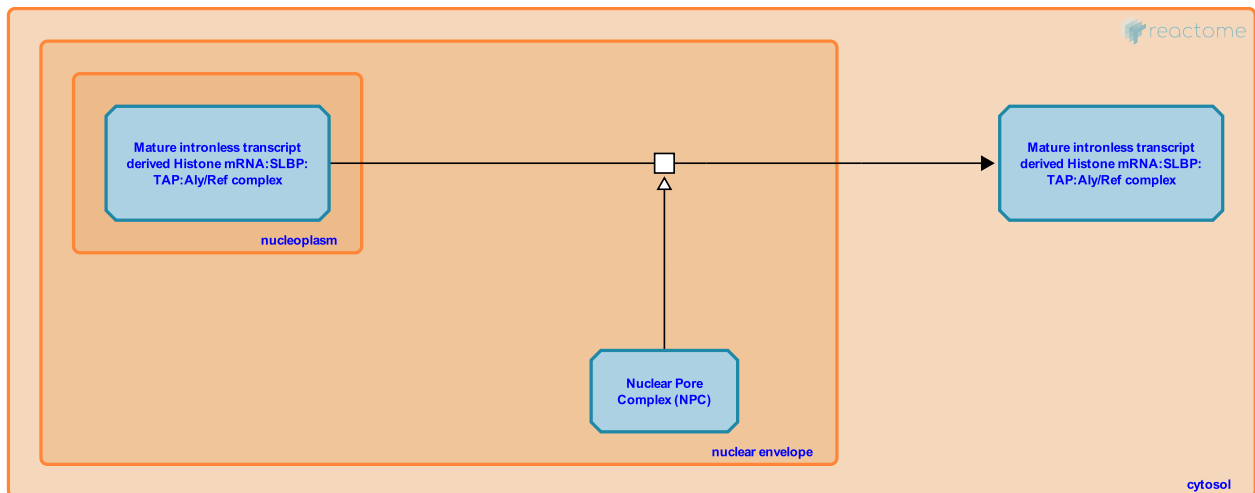
Location: [Transport of the SLBP Dependant Mature mRNA](#)

Stable identifier: R-RNO-159046

Type: transition

Compartments: nuclear envelope, cytosol, nucleoplasm

Inferred from: [Transport of the Mature Intronless Transcript Derived Histone mRNA:SLBP:TAP:Aly/Ref complex through the NPC \(Homo sapiens\)](#)



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: [Docking of Mature Replication Dependent Histone mRNA with the NPC](#)

Followed by: [Release of the Mature intronless transcript derived Histone mRNA:SLBP:eIF4E Complex](#)

Release of the Mature intronless transcript derived Histone mRNA:SLBP:eIF4E Complex ↗

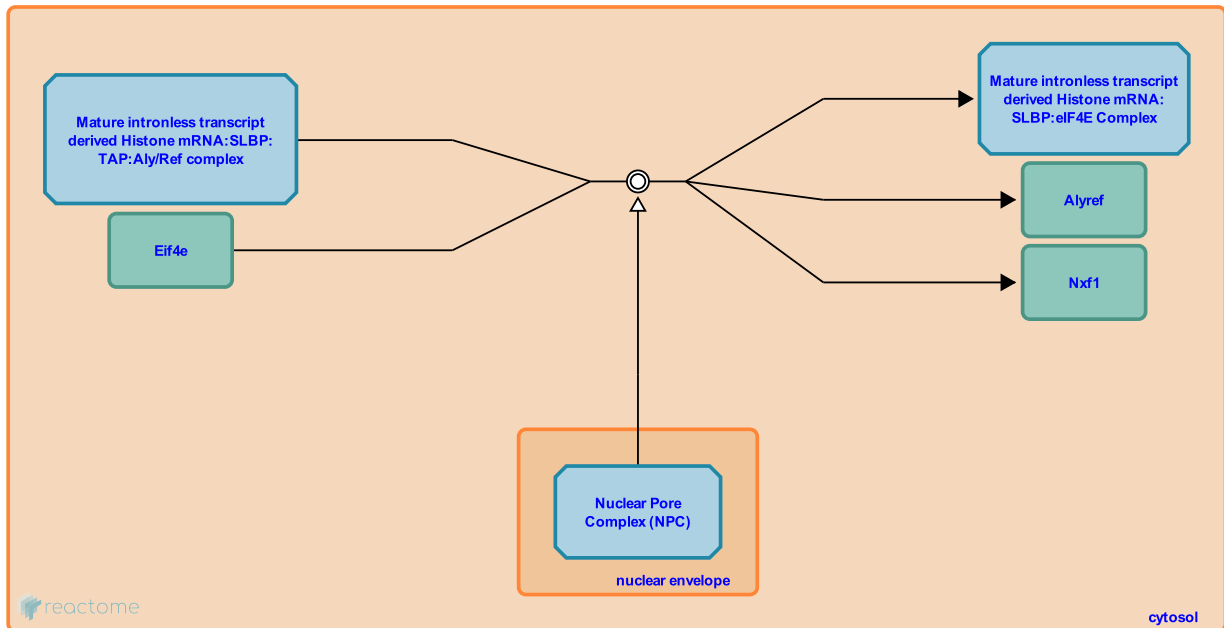
Location: [Transport of the SLBP Dependant Mature mRNA](#)

Stable identifier: R-RNO-159050

Type: dissociation

Compartments: cytosol, nuclear envelope

Inferred from: [Release of the Mature intronless transcript derived Histone mRNA:SLBP:eIF4E 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>

Preceded by: [Transport of the Mature Intronless Transcript Derived Histone mRNA:SLBP:TAP:Aly/Ref complex through the NPC](#)

Table of Contents

Introduction	1
❏ Transport of the SLBP Dependant Mature mRNA	2
↳ Docking of Mature Replication Dependent Histone mRNA with the NPC	3
↳ Transport of the Mature Intronless Transcript Derived Histone mRNA:SLBP:TAP:Aly/Ref complex through the NPC	4
↳ Release of the Mature intronless transcript derived Histone mRNA:SLBP:eIF4E Complex	5
Table of Contents	6