reactome

Formation of an intermediate Spliceosomal C (Bact) complex

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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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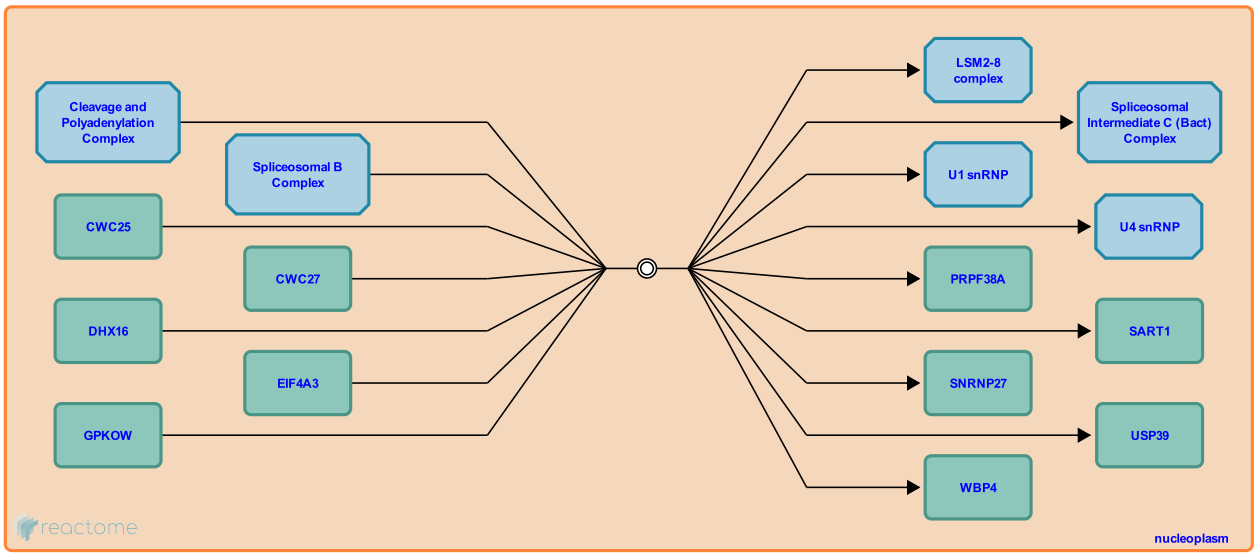
Stable identifier: R-HSA-72130

Type: dissociation

Compartments: nucleoplasm



The intermediate spliceosomal C complex (also called the Bact or B(act) complex) is a very short-lived intermediate; the splicing intermediates are rapidly converted to splicing products. Also, the spliced products are released very rapidly, and no complex containing both the splicing products has been isolated. Conversion of the spliceosomal B complex to the spliceosomal C complex requires ATP. The extensive base-pairing between the U4 and U6 snRNAs is disrupted during the formation of the C complex, which is thought to require helicase-type activity associated with the DEAD box factors. The U4 snRNP and U1 snRNP dissociate from the complex and the LSM2-6 complex of the U6 snRNP is lost, apparently allowing the U6 snRNA to then base-pair with the U2 snRNA and the 5' end of the splice site on the mRNA (Bessonov et al. 2010).

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Editions

2003-06-05	Authored	Krainer, AR.
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