Title:	High Copy Suppressor Of Mutant In Hub1 And Regulation Of AAA-ATPase Sap1
Authors:	Arundhathi Dev J.R. (/jspui/browse?type=author&value=Arundhathi+Dev+J.R.)
Keywords:	Ubiquitin like proteins Putative third surface of Hub1 DNA techniques Growth assays
Issue Date:	Nov-2019
Publisher:	IISER Mohali
Abstract:	Hub1 is an unconventional UBL involved in alternative splicing and splice site se- lection which is essential in Schizosaccharomyces pombe. Two functional surfaces of Hub1 have been previously reported. The D22, essential for its interaction with Snu66 and the H63, necessary for its interaction with Prp5. In addition to this, a third surface has been identified in our lab whose mutation shows lethality at 37 ◦ C. The S. pombe uncharacterized protein SPCPB16A4.06c, along with Zwf1, a glucose- 6-phosphate dehydrogenase and Rpl101, a 60S ribosomal protein, are identified to be multi copy suppressors of this growth defect exhibited by Hub1 surface III mutant. The second experiment done was to study the role played by sumoylation in Tup1 mediated glucose repression by monitoring its relevance in the expression of Sap1 C. The SIN1 Associating Protein, Sap1 is an ATPase of the AAA family whose biological relevance is being studied. The shorter isoform of Sap1, the Sap1 C is expressed only after the Diauxic shift where the glucose repression of Sap1 C is mediated by Tup1. This study shows that Sumoylation of Tup1, which is known to regulate its activity as a repressor, dampens the efficiency of Tup1 facilitated repression of Sap1 C.
URI:	http://hdl.handle.net/123456789/1609 (http://hdl.handle.net/123456789/1609)
Appears in Collections:	MS-14 (/jspui/handle/123456789/1078)

Files in This Item:

File	Size	Format	
MS14117.pdf (/jspui/bitstream/123456789/1609/1/MS14117.pdf)	1.52 MB	Adobe PDF	View/Open (/jspui/bitstream/123456789/1609/1/MS1411

Show full item record (/jspui/handle/123456789/1609?mode=full)

(/jspui/handle/123456789/1609/statistics)