Abstract

Hub1, the non-canonical ubiquitin like protein is involved in alternative splicing of genes by interacting with the HIND (Hub-1 interacting Domain) containing proteins. In multicellular organisms, the pre-mRNA targets that require Hub1 for splicing are not yet known. Here in the multicellular nematode C. elegans, we report that Hub1 is required for the efficient splicing of the gene tos-1 (target of splicing). In C. elegans there are two putative proteins Prp38 and Snu66 that harbor HIND like sequence. However, the HIND of Prp-38 did not interact with Hub1 in yeast two hybrid assay. Additionally in C. elegans, Hub1 shows temporal expression during the development of the worm and is also essential for viability. Thus Hub1 role in RNA splicing seems to be conserved in this multicellular organism.