

Protein Prp45, an essential factor of the yeast *Saccharomyces cerevisiae*, is implicated in pre-mRNA splicing. A truncated version of the PRP45 gene, prp45(1-169), which exhibits a temperature sensitivity, was previously prepared in our laboratory. The aim of this work is to contribute to better understanding of prp45(1-169) mutant phenotype. We tested the prp45(1–169) strain for its response to microtubule inhibitor benomyl and then we found that TUB3 overexpression from plasmid rescues discovered prp45(1–169) mutant cells hypersensitivity to benomyl. In addition, we studied the influence of TUB1, TUB3, and COF1 intron deletion on prp45(1–169) strain temperature sensitivity. Using RT-qPCR method we found that prp45(1–169) mutation results in the distinctive increase of pre-mRNA level for all tested genes, that could implicate that pre-mRNA splicing in these cells is affected before first transesterification.