

## Abstract

Modifications of ribosomal RNA are present in every living organism. The function of rRNA modifications could be studied only when the process of modifications was described. Currently, scientists study not only individual modifications but also the importance of global level of modifications for maturation and function of ribosome.

This thesis deals with the influence of 2'-O-methylation of citidine 1639 and adenosine 100 in 18S rRNA and uridine 2729 in 25S rRNA on initiation in yeast *Saccharomyces cerevisiae* with special attention of translation controlled by internal ribosome entry site (IRES). Strains with deletion in genes snR51, snR70 and double deletion in both genes were successfully created during my master study. Pilot experiments showed the importance of products of both genes in translation initiation.