

## **ABSTRACT**

Exocyst is a binding protein complex, which is evolutionary conserved in yeast, animal and in plant cells. It has crucial role in regulation of cell morphology and cell polarity. The function of the exocyst complex is binding of secretory vesicle to the proper site on plasma membrane in penultimate step of exocytosis. This process is essential for function and survival of cell. Another process crucial for the cell is autophagy. In plants autophagy plays important role in the responses to nutrient starvation, senescence, abiotic and biotic stress. RabG3b are small GTPases, which have positive role in autophagy. In this work I described the interaction between RabG3b and some of subunits of exocyst complex: Exo70B1, Exo70B2 and Exo84b. I also studied changes in morphology of tonoplast by induction and inhibition of autophagy and induction of anthocyanin synthesis in *Arabidopsis thaliana*.