

Auxin is one of the most important plant hormones, which provides development of a plant. PIN1 and PIN7 proteins belong to the PIN family of transporters which is among the most important auxin efflux carriers.

This thesis deals with the of *AtPIN1* and *AtPIN7* auxin efflux carriers (from *Arabidopsis thaliana*) in human embryonic kidney 293 cell line. Biological activity of these proteins was tested by using radiolabeled auxins accumulation. Further inhibitors of auxin transport have been tested - NPA, CHPAA and BFA.