

Comparative study of the action of the thermostable protein complex obtained from the human benign prostate tumor cells'

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A growth-inhibiting endogenous thermostable protein complex (TPC) has been identified in various cells of eukariotic organisms. The low molecular weight component of the mentioned complex decreases the cell proliferation by inhibiting transcription. A similar complex has been also isolated from benign tumor cells of the human prostate gland in which the minor content of the active substance was established.

The aim of the work was comparative study of the action of the thermostable protein complex obtained from the human benign prostate tumor cells'.

The effect of TPC from human prostate benign tumor cells and adult white rat prostate (in which active component is in minor content) on the proliferative activity of various tissues (brain, liver) of adolescent rats was studied. It was found that both TPC, mentioned above, had not the inhibitory effect on the brain and liver cells mitotic activity. In particular, no reliable difference was found between the value of mitotic index of the control and experimental group animals. The obtained results suggest that the minor content of TPC active component in both human and rat prostate cells is typical and is likely to be related to the intensity of androgen receptor expression.