

Identification and comparative study of the growth-inhibiting endogenous thermostable protein complex obtained from the human benign prostate tumor cells

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Keywords: rat, growth factor, prostate cancer, benign prostate hyperplasia, calmodulin

Biotherapy is one of the most promising directions for the treatment of cancer today, which involves the activation of the body's protective mechanisms by using growth factors and / or their inhibitors. Particular importance is attached to growth-inhibiting endogenous factors that do not exert the same toxic effects on other tissue cells as the chemotherapy.

The purpose of the presented paper was Identification and comparative study of the growth-inhibiting endogenous thermostable protein complex obtained from the human benign prostate tumor cells.

The endogenous thermostable protein complex from the benign prostate tumor cells (postoperative material obtained by transurethral resection) was isolated and partially purified. Polyacrylamide gel electrophoresis revealed that the complex contained two subgroups of the proteins: relatively high molecular weight (40-60 kD) and low molecular weight (12-14kD). TPC obtained from adult rat different organs were used as a control.

It was revealed that the low-molecular weight component of the complex, the protein calmodulin, is present in minor quantities in the cells of human benign tumor cells. Immunohistochemical analysis confirmed the obtained data the minor content of calmodulin in the human benign prostate tumor cells.