

Comparative study of growth inhibitory factors isolated from prostate tissues of different organisms

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Growth inhibitory thermo-stable protein complex (TPC) isolated from benign tumor cells of the human prostate and various tissues (liver, brain, heart, pancreas and prostate) of adult rats has been studied by electrophoresis in polyacrylamide gel. It has been shown that TPC isolated from benign tumor cells of the human prostate similar to TPC isolated from different tissues of adult rat contains two subgroups of proteins: relatively high-molecular (20-120kDa) and low-molecular (11-17kDa) protein subfractions. TPC isolated from benign tumor cells of the human prostate after intraperitoneal administration does not exhibit its inhibitory effect on the proliferative activity of various tissues of the intact juvenile white rats, which explained by the minor content of the active component in TPC. A minor content of the low-molecular component was also found in the TPC of the adult rat's prostate. It has also been established that the protein complex does not alter the histoarchitectonics of liver and brain tissues of the adolescent rats, which indicates that the thermostable protein complex does not have a toxic effect on the mentioned tissues.