

Abstract

In presented study neutral ribonucleases were isolated from senescent potato tubers (*Solanum tuberosum*). Obtained extract was purified using gradient ion-exchange chromatography, gel chromatography and ultrafiltration. Purity was finally evaluated by the SDS-PAGE. An *in vitro* test was used for ribonuclease activity testing. In the following step the enzymes were conjugated with PEG₅₀₀₀-FITC for their stabilization and visualization during *in vivo* test. The significant dose of the enzyme conjugate was finally applied to athymic immunodeficient nu/nu mice with transplanted human tumors (pancreatic or prostatic) to observe body distribution and clearance that was measured by fluorimetry (blood and urine) and evaluated by fluorescent microscopy (normal and tumor tissues) that was also used for tissues morphology changes evidence.