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**Identification of a protease inhibitor from  
*Alismatis Rhizoma***

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A protease inhibitor was isolated and purified from *Alismatis Rhizoma* which has been used as a galenic for diuretic and antiphlogistic. Purification was carried out by 0-80% saturated ammonium sulfate salting out, DEAE-cellulose ion exchange chromatography, Sephadex G-150 gel filtration. The molecular weight of *Alismatis Rhizoma* trypsin inhibitor(ARTI) was estimated to be about 23,000 Da by gel filtration and SDS-PAGE, it must be monomer. The optimal pH and temperature were pH 7.4 and 37°C respectively. ARTI was stable at 0~60°C, but at higher temperature its activity was decreased about 35%. When benzoyl-dl-arginine p-nitroanilide was used as a substrate of trypsin, half-maximal inhibition of ARTI was observed at 0.071  $\mu$ M. ARTI inhibited the hydrolysis of trypsin non-competitively and Km value was 0.81  $\mu$ M.