

제 목	Development of Fibrinolytic Agents from Snake Venoms
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내 용	<p>Fibrinolytic proteases, piscivorase I (P I) and piscivorase II (P II), were isolated from <i>Agkistrodon piscivorus piscivorus</i> (eastern cottonmouth moccasin) venom using gel filtration on Bio-Gel P100 and ion-exchange chromatography on CM-Sepharose. The molecular weights of two proteases were approximately 23400 and 29000. Their isoelectric points 6.6 and 8.5, respectively. The partial amino acid sequences of P I were characterized by tryptic digestion. P I readily cleaves the Aα- and Bβ-chain of fibrinogen, but P II rapidly cleaves Aα- chain and more slowly the Bβ-chain. They were activated by Ca²⁺, Mg²⁺ and Ba²⁺, but inhibited by Zn²⁺, Cu²⁺ and Mn²⁺. Two enzymes were also inhibited by cystein, β-mercapto-ethanol, and by metal chelators such as EDTA and EGTA, but not by benzamidine, PMSF, soybean trypsin inhibitor and aprotinin. They did not act like thrombin, plasmin and kallikrein, using specific chromogenic substrates. Two protease did not induce platelet aggregation. P I showed low hemorrhagic activity at dosage of 50 μg.</p>