

Supplementary materials

Edema induced by a *Crotalus durissus terrificus* venom serine protease (Cdtsp 2) involves the PAR pathway and PKC and PLC activation.

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Supplementary Results

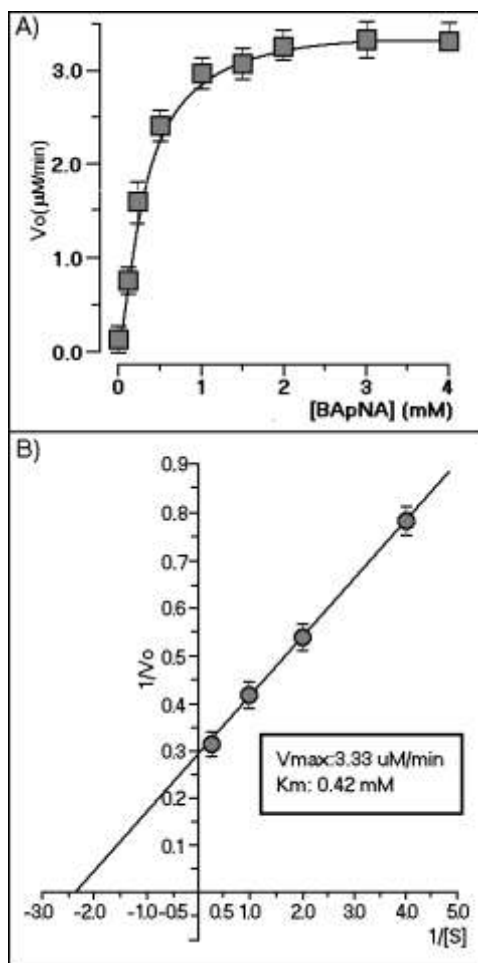


Figure S1. Graphics of the Cdtsp2 enzymatic assay. (A) Enzymatic assay of Cdtsp2 (V_o ($\mu\text{Mol}/\text{min}$) vs. $\text{N}\alpha$ -benzoyl-L-arginine 4-nitroanilide (BAPNA; mM)). (B) V_{max} and K_m values were obtained from a Lineweaver-Burk plot. The protocol designed by Prasa et al. [49] was used to perform this test. The reagents used were 50 mM Tris-HCl buffer (pH 7.4) 100 mM NaCl, and a thrombin generation chromatogenic substrate (thrombin-like; 1mg/ml). The three points in the graph represent a control group with only the substrate, Cdtsp2 (1mg/ml) incubated with substrate, and gyroxin (1mg/ml) incubated with substrate, in a microplate reader incubated at 37 °C. The readings were determined on a SPECTRA MAX (Molecular Devices, CA) at a wavelength of 405nm.

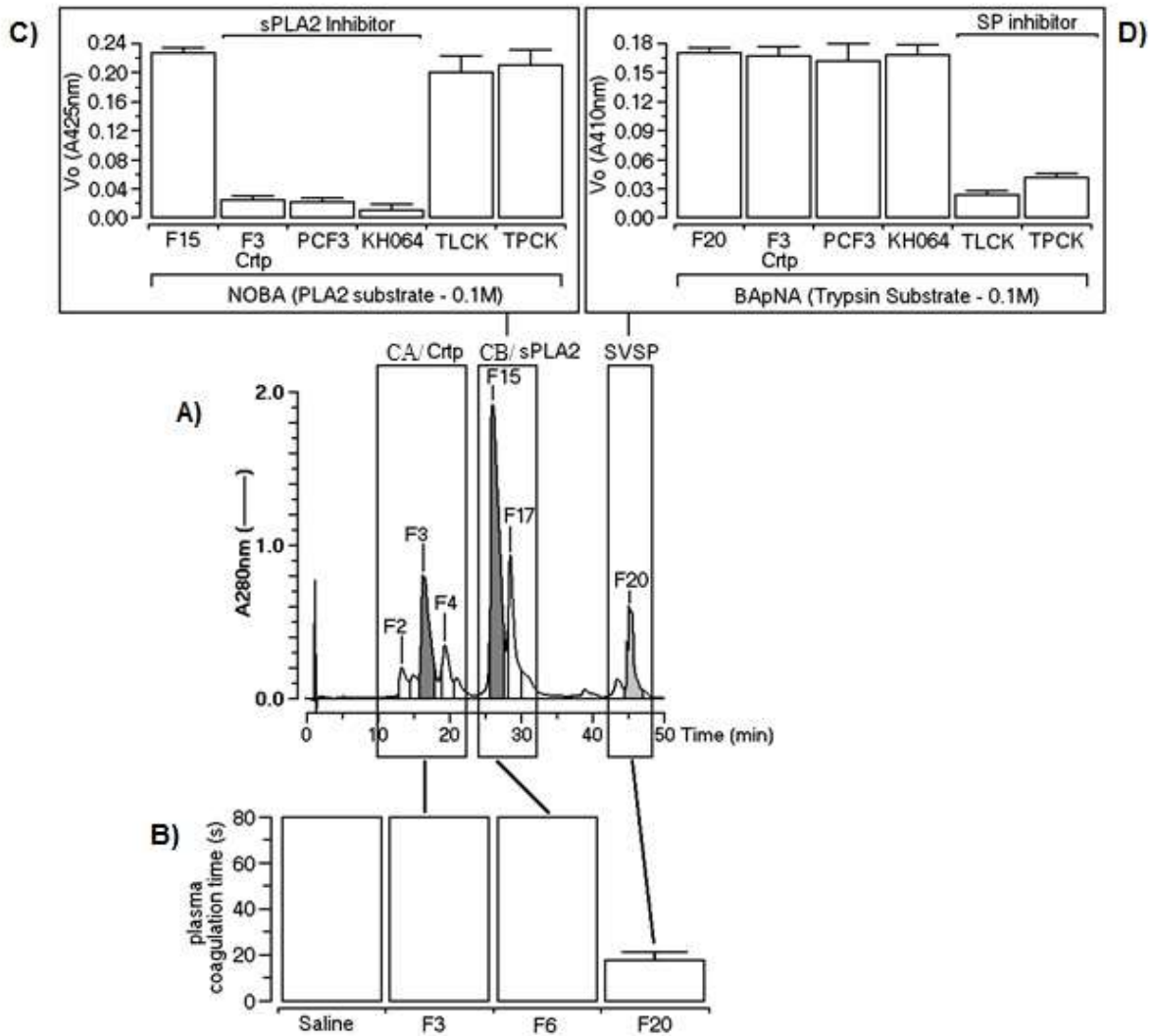


Figure S2. In the attached figure, we present a set of results compiled showing the fractionation. (A) Venom purification using a Superdex G75 chromatographic column pre-packed on an HPLC column (1.6 x 60 cm) previously equilibrated with two column volumes of ammonium bicarbonate buffer (0.1M, pH 7.9). The isocratic flow was maintained at 0.2 mL/min for the whole crotoxin fraction, as well as for the fractionation of CA (acid component, crotoxin A; crotapotin (Crpt)), CB (basic component, crotoxin B; secretory phospholipase A2 (sPLA2)), and a new group of proteases that were eluted with fraction F20. After a period of chromatography, F20 produced the serine protease, F202, identified as Cdtsp2 isolated from the venom of *Crotalus durissus terrificus* (Cdt). The Cdtsp2 fraction originated from the total Cdt venom eluted in the F20 fraction, whose trypsin activity was inhibited (D) by N-tosyl-L-phenylalanine-chloromethyl ketone (TPCK) and N α -tosyl-L-lysiny-chloromethyl ketone (TLCK). sPLA2 (F16) was inhibited by its natural F3 Crtp inhibitor along with the palmitoyl trifluoromethyl ketone inhibitor (PACOCF3; PCF3 in the figure) and 5-(4-benzyloxyphenyl)-4S-(7-phenylheptanoylamino) pentanoic acid (KH064 in the figure). This effect was not observed for the F20 fraction. Therefore, the biological effects induced by CdtSP2 did not involve contamination with sPLA2 (C). However, only one F20 fraction presented a single coagulation display of citrated ox plasma, which was determined following the protocol described by Fonseca et al. [27] (B).