

## Supplementary information

**Supplementary table 1.** Equine hyperimmunization protocol.

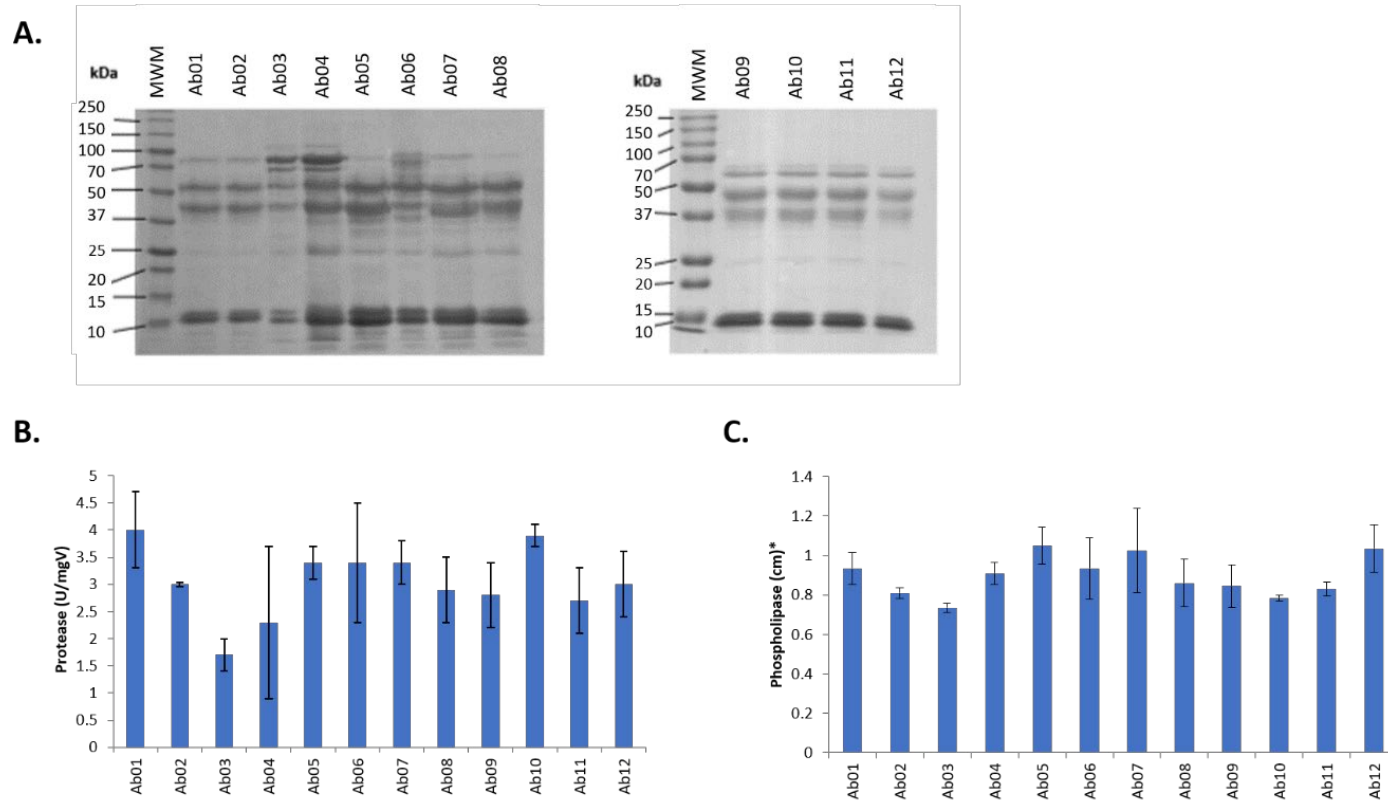
#	Immunization		Adjuvant		Venom		Blood sample
	Date	Route	Type	Vol. (ml)	µg	µl	Vol. (ml)
1	18-Dec-13	ID	IFA	1.3	100	5	5
2	24-Dec-13	SC	IFA	0.7	100	5	5
3	08-Jan-14	SC	ALUM	0.4	200	10	5
4	22-Jan-14	SC	IFA	0.7	250	13	5
5	05-Feb-14	SC	ALUM	0.4	500	25	5
6	19-Feb-14	SC	-	0	1000	50	5
7	05-Mar-14	SC	IFA	0.7	2000	100	5
8	19-Mar-14	SC	ALUM	0.4	4000	200	250
9	02-Apr-14	SC	-	0	5000	250	250
10	16-Apr-14	SC	IFA	0.7	6000	300	250
11	30-Apr-14	SC	ALUM	0.4	6000	300	250
12	14-May-14	SC	-	0	6000	300	250

ID. Intradermal

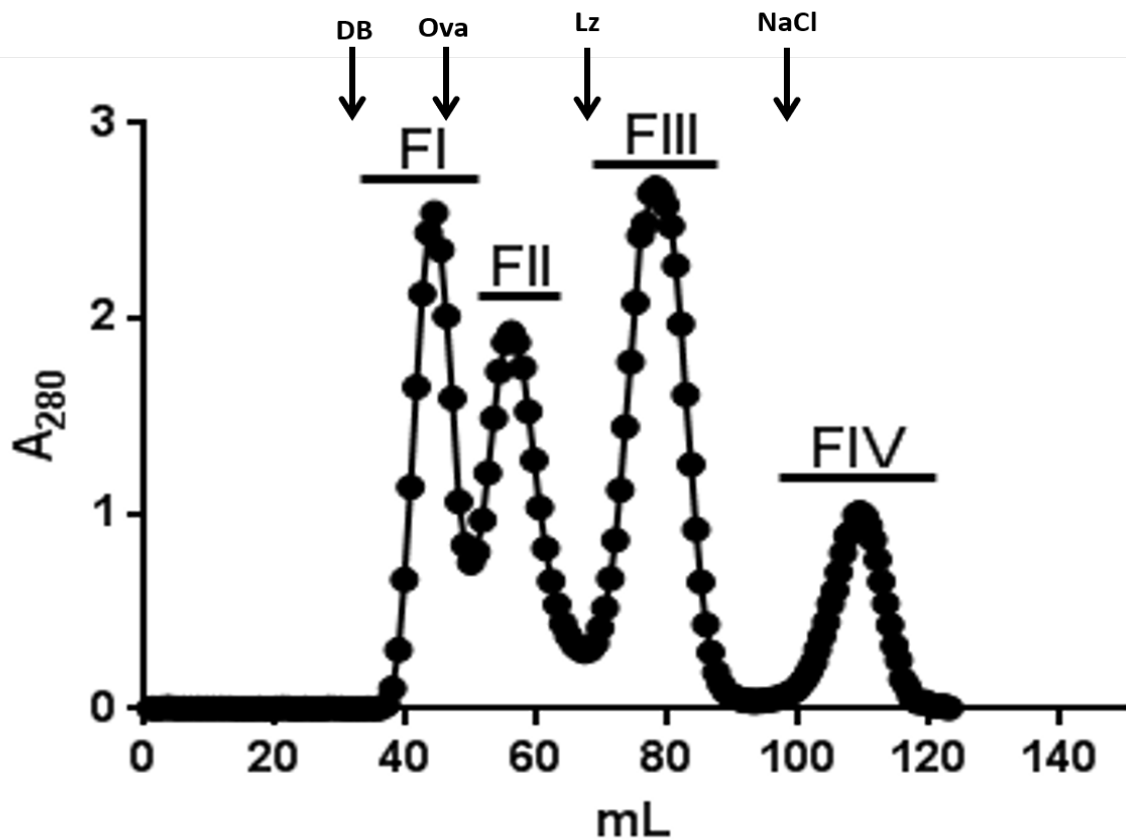
SC. Subcutaneous

IFA. Incomplete freund adjuvant

ALUM. Alumina



**Supplementary figure 1. Venom variation among adult individuals of *Agkistrodon bilineatus* across its geographical distribution.** A. 15% SDS-PAGE. *MWM*. Molecular weight markers. kDa. Kilodaltons. B. Protease activity on azocasein *U/mgV*. Units per milligram of venom. C. Phospholipase activity measured on agar plates and 10% egg-yolk solution as substrate. *cm*. Diameter of halo in centimeters. *Mexican state of origin of specimens: Ab01*. Colima. *Ab02*. Sinaloa. *Ab03, Ab11 and Ab12*. Morelos. *Ab04*. Nayarit. *Ab05*. Guerrero. *Ab06*. Oaxaca. *Ab07-10*. Chiapas.



**Supplementary figure 2. Sephadex G<sub>75</sub> gel filtration chromatography of *Agkistrodon bilineatus* venom (80.5 AU<sub>280nm</sub>).** Column equilibrated with PBS, pH 7.2. Dimensions 197 x 90 mm. Total volume 125 mL. Flow speed: 14.2 mL/hr. Elution volume of molecular weight standards is shown with arrows. *DB*. Dextran blue. *Ova*. Ovalbumin. *Lz*. Lizozyme. *NaCl*. Sodium chloride.