

## SUPPLEMENTARY MATERIAL

**Table 1.** Tryptase level, total IgE and specific IgE titers of the patient's serum from the day of anaphylaxis.

Tryptase level	49 µg/L
Total IgE	1106 kU/L
slgE <i>Apis mellifera</i> (native)	0.24 kU/L
Api m 1	<0.1 kU/L
Api m 2	<0.1 kU/L
Api m 3	0.11 kU/L
Api m 5	<0.1 kU/L
Api m 10	<0.1 kU/L
slgE <i>Vespula vulgaris</i> (native)	0.51 kU/L
Ves v 1	0.13 kU/L
Ves v 5	0.6 kU/L
CCD (HRP)	0.24 kU/L
CCD (MUXF3)	0.20 kU/L
slgE snake venom mix (ELISA)	> 100 kU/L

Normal tryptase levels are < 11.4 µg/L, normal total IgE titers are < 150 kU/L, normal slgE titer are < 0.1 kU/L. slgE titer to snake venom was measured by using a standard curve of serial dilutions of a patient serum with a known slgE titer to cat serum albumin.

**Table 2.** Identification of immuno-reactive spots from 2D analysis by mass spectrometry (MALDI-TOF-TOF; database SwissProt 2017\_04).

Spot	ID	Accession number	Number of peptides identified
1	Basic phospholipase A2 CM-II OS= <i>Naja mossambica</i>	P00603	4
2	Basic phospholipase A2 CM-II OS= <i>Naja mossambica</i>	P00603	4
3	Acidic phospholipase A2 CM-I OS= <i>Naja mossambica</i>	P00602	5
4	Phospholipase A2 "basic" OS= <i>Najanigracollis</i>	P00605	4
	Basic phospholipase A2 homolog 2 OS= <i>Bothrops asper</i>	P24605	1
	Acidic phospholipase A2 CM-I OS= <i>Naja mossambica</i>	P00602	2
5	Phospholipase A2 "basic" OS= <i>Najanigracollis</i>	P00605	1

**Figure 1.**

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P00605_NAJNG PLA2 1 NLYQFKNMIHCTVSRPWWHFADYGCYCGRGSKGTPEVDDLDRCQVHENCYEKAGKMGCWPLYLT-----LYKYRCSQGK 74
P00630_APIME PLA2 1 -----IIYEGTLWCGHGNKSSGPNELR---FKHTDACCGRTHDMYCPDVMSAGESKHGLTNTASHTRLSCDQDDKF 67

P00605_NAJNG PLA2 75 LITSGGNSKCGAAVCN----CDLVAANGFAGARYIDAN-----YNIN-----FKKRCQ 118
P00630_APIME PLA2 68 YDGLKNSADTISSYFVGKMYFNLIDTRGKYLEHPVIGCGERTEGRCLHYTVDKSKPKVYQWFDLRKY 134

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Alignment of the protein sequence of PLA2 from snake *Naja nigricollis* (Uniprot accession number P00605) and honey bee *Apis mellifera*, Api m 1 (Uniprot accession number P00630). Identical residues are highlighted in dark grey, similar residues are highlighted in light grey (Clustal W program). The box highlights the calcium binding site of snake PLA2 as described<sup>1</sup>.

#### References:

1. Trento MVC, Sales TA, de Abreu TS, Braga MA, Cesar PHS, Marques TR, Marcussi S. Exploring the structural and functional aspects of the phospholipase A2 from *Naja* spp. *Int J Biol Macromol.* 2019;140:49-58.