

CITEQ

biologics

CERTIFICATE OF ANALYSIS

(For research use only)

GENERAL DATA			
Article Number	04.07.85		
Article description	Bee (<i>Apis mellifera</i>) venom extract, Freeze Dried		
Storage	Upon arrival -20 °C		
Production Date	March, 2019		
Charge Number	19C10		
RAW MATERIAL / PRODUCTION PROCES			
Collection location	Central Europe		
POST HARVEST PROCESSING OF THE VENOM			
Extraction	The venom was obtained by electrostimulation of bees		
Freeze drying	The extract has been freeze dried after centrifugation		
IDENTITY / PURITY			
Identity	Result	Specifications	Reference
Species	OK	<i>Apis mellifera</i>	Literature
Character material	OK	Cream colour powder	Visual determination
Allergenic pattern	Apamine Phospholipase A2 Mellitine	OK	Present in chromatogram HPLC assay
Protein content (mg/g)	191 674	150-750 500-1000	Bradford assay BCA assay
Protein pattern	OK	Clear bands	SDS-PAGE gel; CBB staining, silver staining
Blotting	OK	Clear bands	Immunodetection; serum
Endotoxine (EU/mg)	< 1	< 1000	Endotoxine
Hyaluronidase (IU/mg)	6,2	0.5 – 15	Ph. Eur.
Bioburden (Cfu/mg)	TSA SDA	< 0,3 1	< 1 x 10 ⁴ < 1 x 10 ⁴ Ph. Eur.
Water content (%)	6,7	< 12 %	Karl Fisher

September 27, 2019

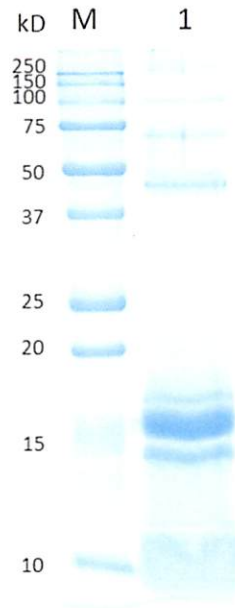
Head of Production

Head Quality Assurance

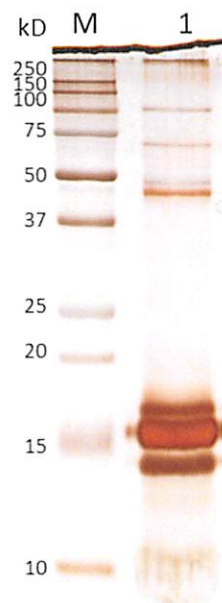
ba


SDS-PAGE analysis

CBB Stain:

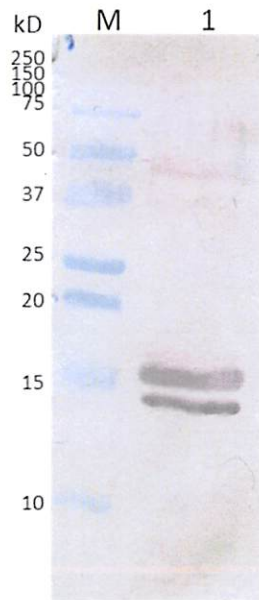


Silver Stain:



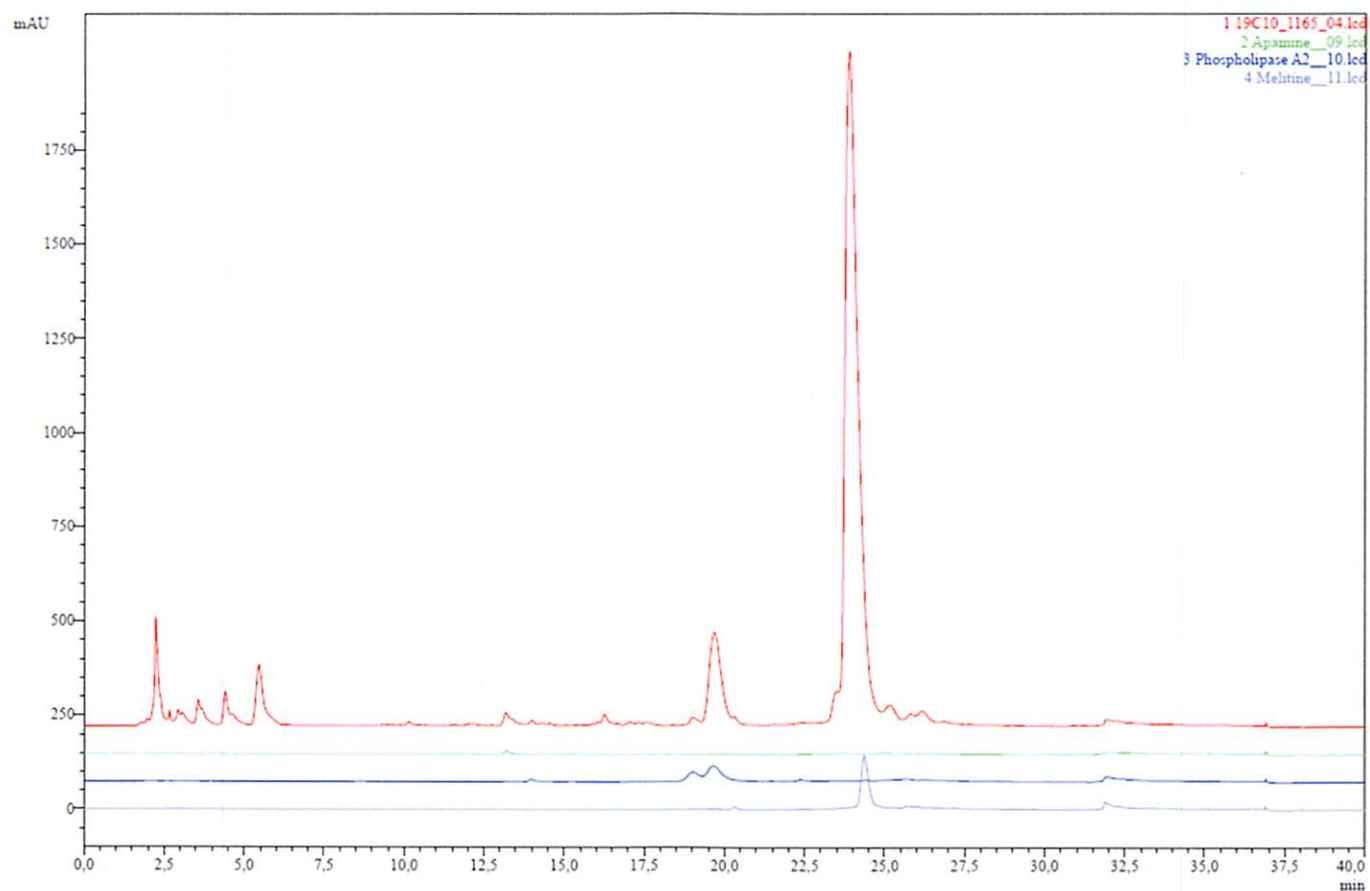
1: Marker, 2: 19C10

Immunodetection:



1: Marker, 2: 19C10

HPLC:



Wavelength: 280 nm

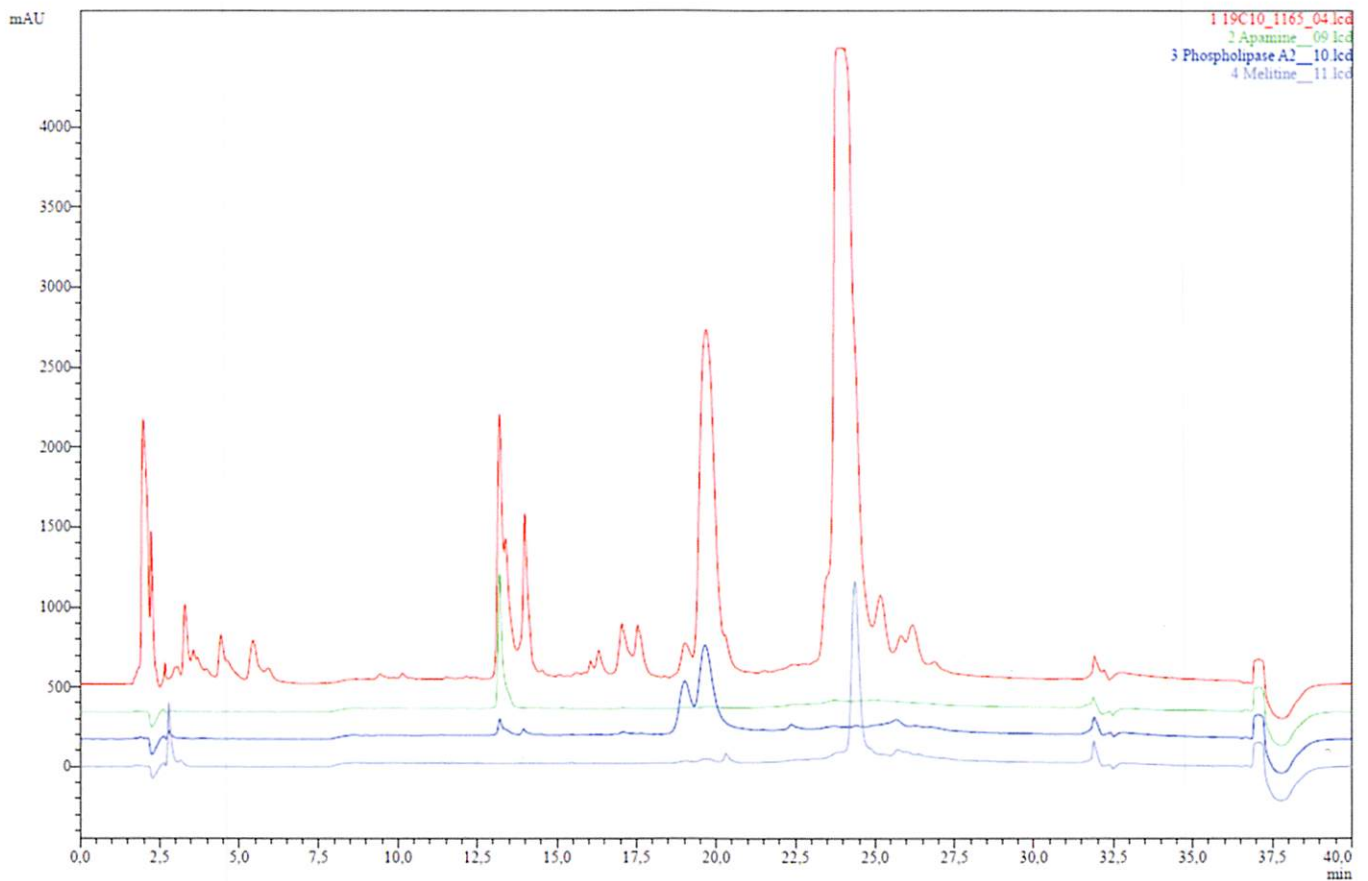
buffer A: 0.1% TFA

buffer B: 0.1% TFA + 80% ACN

gradient: 4-64% in 40 minutes

column: C18

19C10 (red), Mellittin (grey), Apamine (green), Phospholipase A2 (blue)



Wavelength: 214 nm

buffer A: 0.1% TFA

buffer B: 0.1% TFA + 80% ACN

gradient: 4-64% in 40 minutes

column: C18

19C10 (red), Mellittin (grey), Apamine (green), Phospholipase A2 (blue)