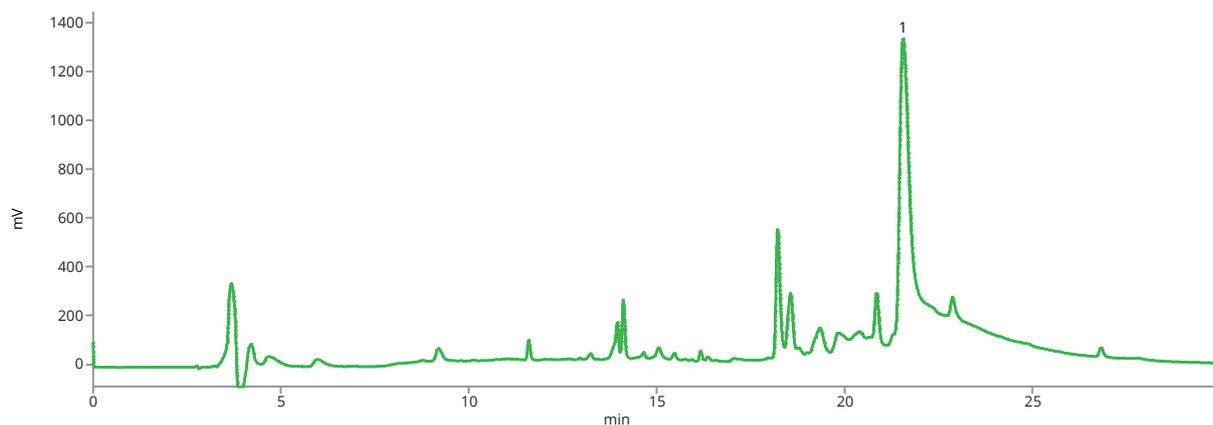
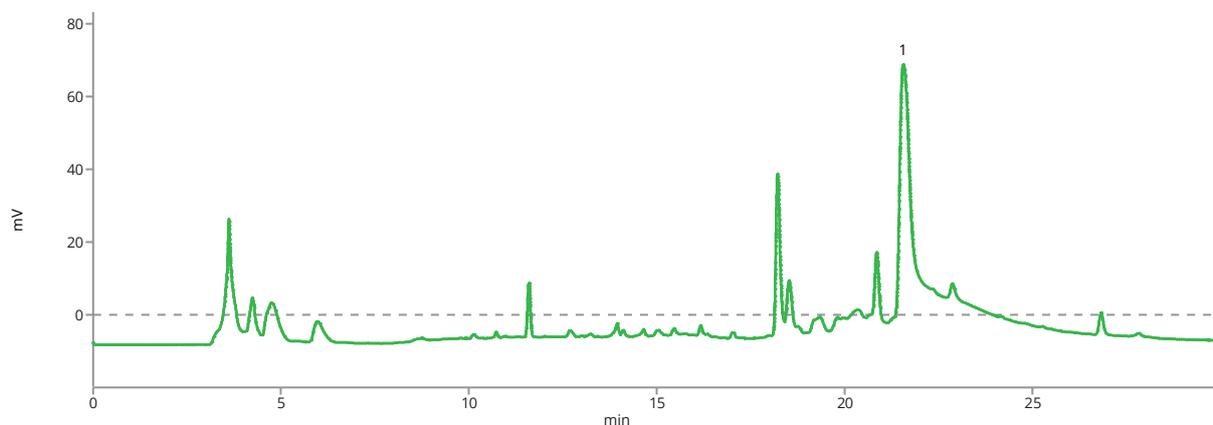


## Purification of vitellogenin from bee haemolymph

Vitellogenins, glycolipophosphoproteins mostly known and well-characterized as precursors of yolk proteins, are involved in reproduction in the majority of oviparous animals. In insects, vitellogenins are typically synthesized in the fat body, from where they are transported via the haemolymph into growing oocytes. The honey bees are no exception: vitellogenin (mw about 200 kDa) is known to play crucial roles in bee reproduction, but its involvement appears to be multifunctional, since vitellogenin influences oxidative stress, nutrition, immunity, and honey bee longevity.



*Elution profile of bee queen haemolymph detected at 215 nm*



*Elution profile of bee queen haemolymph detected at 280 nm*



## Purification of vitellogenin from bee haemolymph

<b>Column</b>	ARION® BIO C4, 5 µm			
<b>Dimensions</b>	250 mm × 4.6 mm			
<b>Part number</b>	ARI-5846-LM46			
<b>Mobile phase</b>	A: 0.11% TFA in water B: 0.1% TFA in 60% ACN			
<b>Gradient elution</b>	<b>Time</b>	<b>A (%)</b>	<b>B (%)</b>	<b>Flow rate (mL/min)</b>
	0	90	10	1.0
	2	90	10	1.0
	20	0	100	1.0
	30	0	100	1.0
<b>Detection</b>	UV at 215 nm and 280 nm			
<b>Injection volume</b>	3 µL			
<b>Analytes</b>	<b>1. Vitellogenin (VTG)</b>			

This application was developed by prof. RNDr. Dalibor Kodrík, CSc., the Biology Centre CAS, České Budějovice, The Czech Republic

