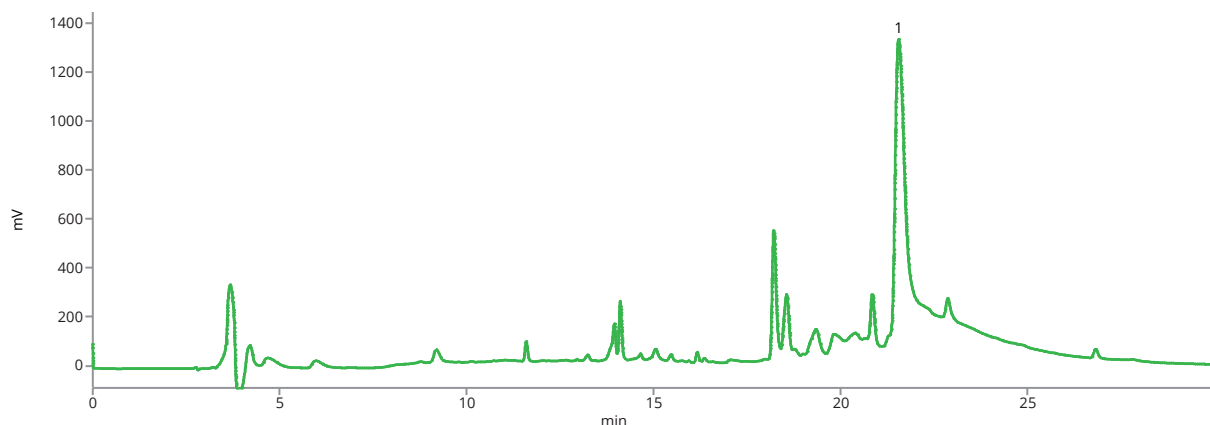
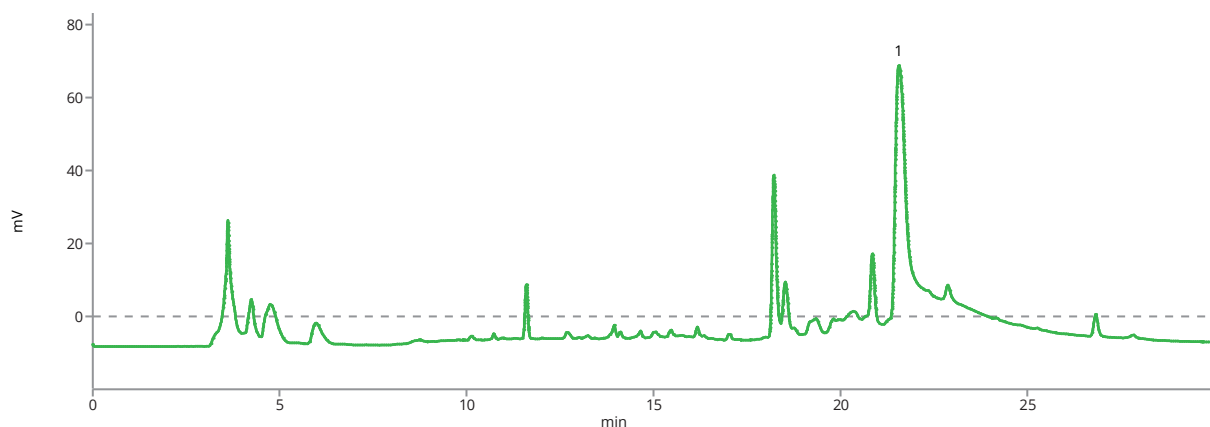


Purification of vitellogenin from bee haemolymph

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

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

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

