

Isolation and Purification of Ginsenosides from Red Panax Ginseng Extract

Reveleris® iES Flash Chromatography System

Introduction

Ginsenosides are a class of steroid glycosides, and triterpene saponins, found exclusively in the plant genus Panax. Ginsenosides have been the target of research on claims of ginseng's efficacy. Isolation and purification of natural products is a challenging, tedious, and lengthy

process requiring multiple steps and a large amount of organic solvent. The use of the Reveleris® automated flash chromatography instrument and Reveleris® reversed-phase cartridges can ease the process.

Experimental

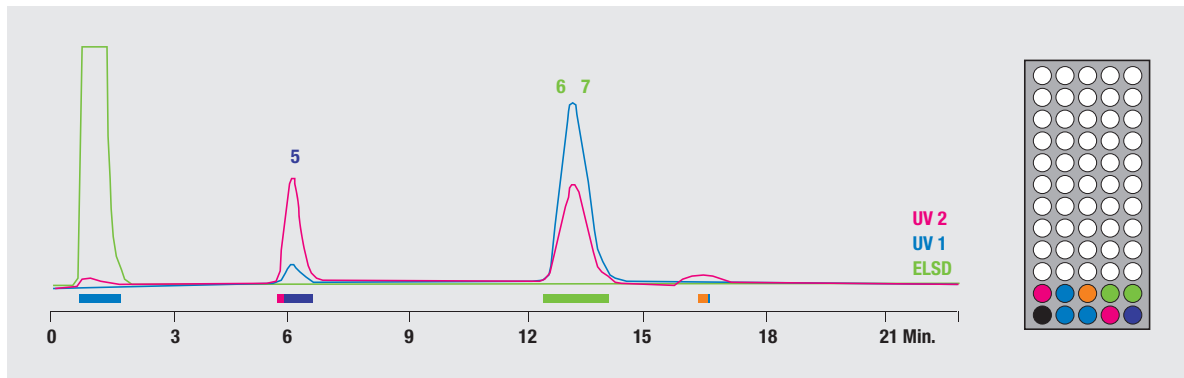
Run Conditions

Cartridge: Reveleris® RP C18 12g
Flow rate: 30 mL/min
Equilibration: 3.0 min
Slope dection: Low
ELSD threshold: 3 mV
UV threshold: 0.02 AU
UV1 wavelength: 254 nm
UV2 wavelength: 280 nm
ELSD carrier: Iso-proponal
Injection type: Liquid
Solvent A: 0.5% Formic acid in Water
Solvent B: Methanol

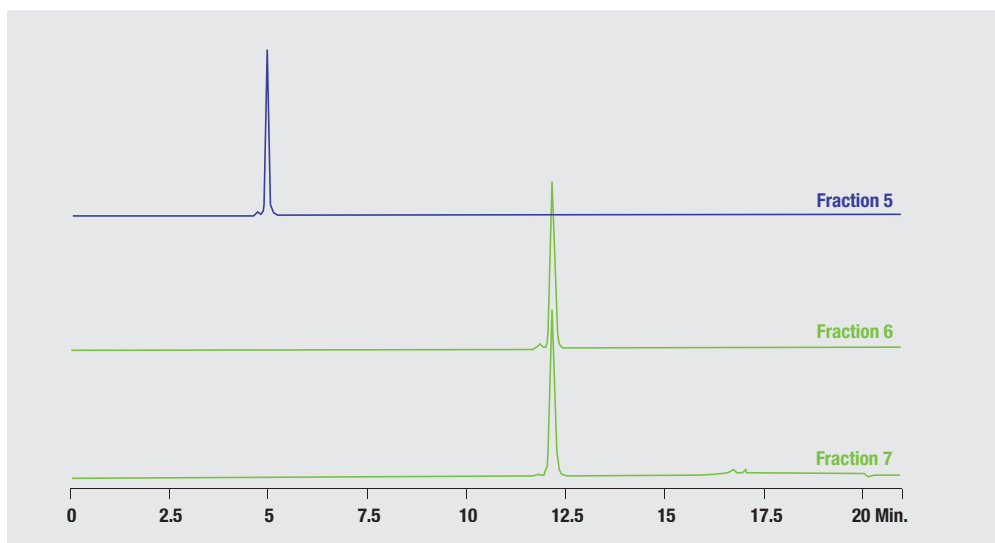
Gradient Method		
Step	Time (min.)	%B
1	0	0
2	2	0
3	13	50
4	1	100
5	1	100
6	1	0
7	1	0



Results and Discussion



Separation of ginsenosides in Red Panax ginseng extract by flash chromatography.



HPLC Chromatograms of Red Panax ginseng fractions collected by Reveleris® flash chromatography.

Conclusion

Using the proposed procedure with the Reveleris® instrument and Reveleris® RP cartridges, the separation and isolation of ginsenosides in Red Panax Ginseng extract can be easily achieved.

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