

Isolation and Purification of Flavonoids from Ginkgo Biloba Leaves Extract

Reveleris® iES Flash Chromatography System

Introduction

Extracts of Ginkgo leaves contain flavonoid glycosides and terpenoids (ginkgolides, bilobalides) and have been investigated for the treatment of dementia and Alzheimer's disease. 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

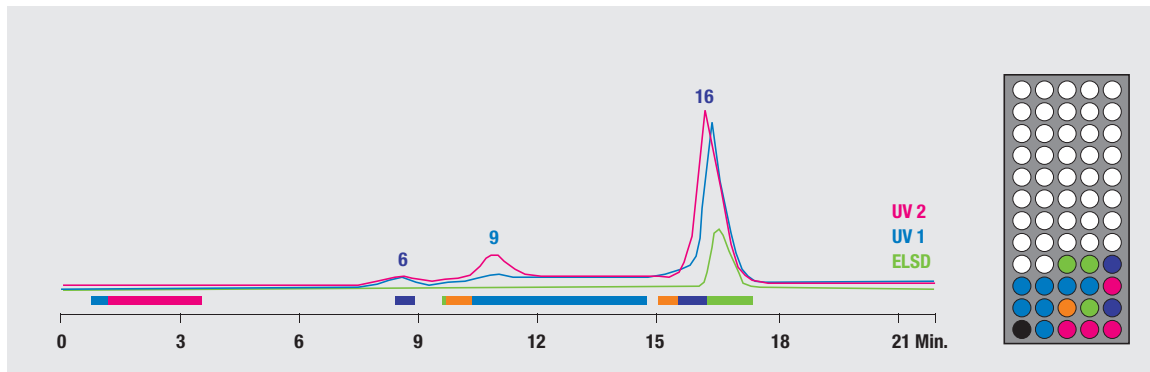
Run Conditions

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

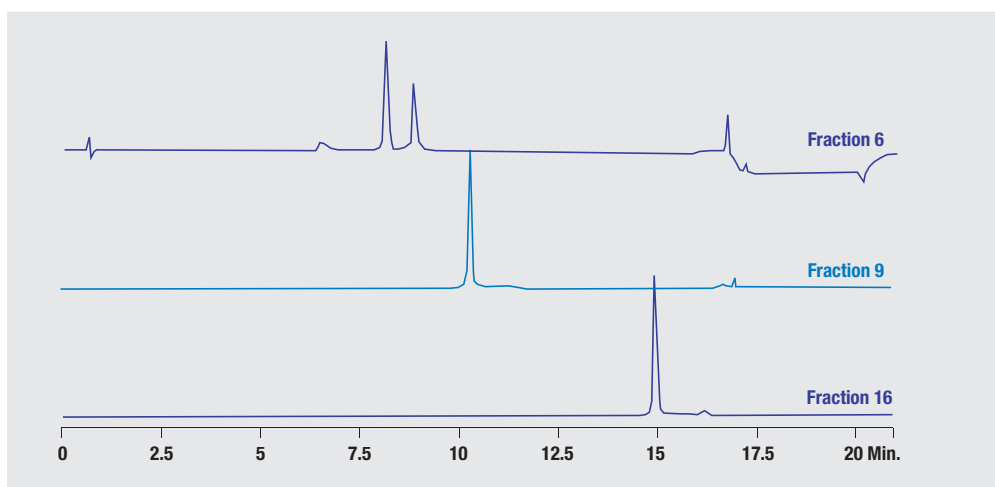
Gradient Method		
Step	Time (min.)	%B
1	0	0
2	2	0
3	13	50
4	1	100
5	1	100
6	1	0
7	1	0



Results and Discussion



Separation of flavonoids in ginkgo biloba extract by flash chromatography.



HPLC Chromatograms of ginkgo biloba fractions collected by Reveleris® flash chromatography.

Conclusion

Using the proposed procedure with the Reveleris® instrument and Reveleris® RP cartridges the separation and isolation of flavonoids in ginkgo biloba extract can be easily achieved.

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