

Isolation and Purification of Chromophoric and Non-chromophoric Compounds in Giant Knotweed Rhizome

Reveleris® iES Flash Chromatography System

Introduction

Giant knotweed rhizome is a common medicinal plant in China, and is used for a range of purposes.

This application note shows the separation and isolation of the chromophoric and non-chromophoric compounds in giant knotweed rhizome by using the Reveleris® automated flash instrument.

Experimental

Run Conditions

Cartridge: Reveleris® RP C18 12g

Flow rate: 30 mL/min

Equilibration: 3.0 min

Slope dection: Low

ELSD threshold: 10 mV

UV threshold: 0.02 AU

UV1 wavelength: 254 nm

UV2 wavelength: 280 nm

ELSD carrier: Iso-proponal

Injection type: Solid

Solvent A: Water

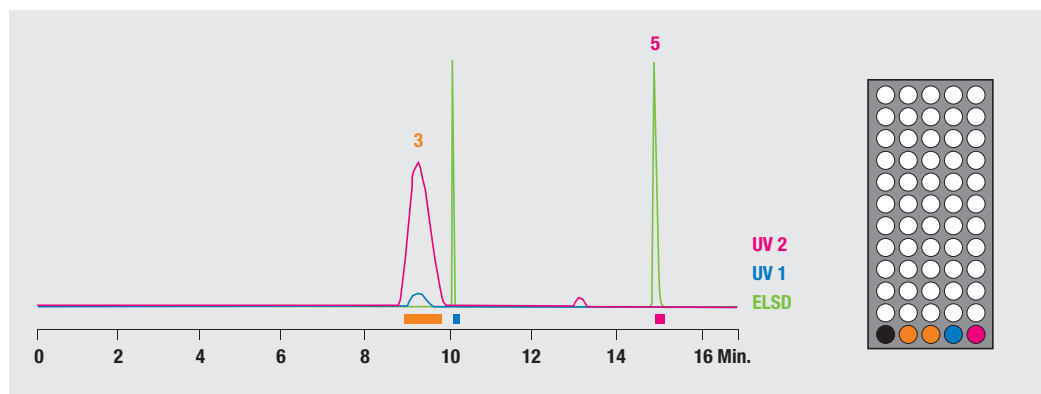
Solvent B: Acetonitrile

Gradient Method

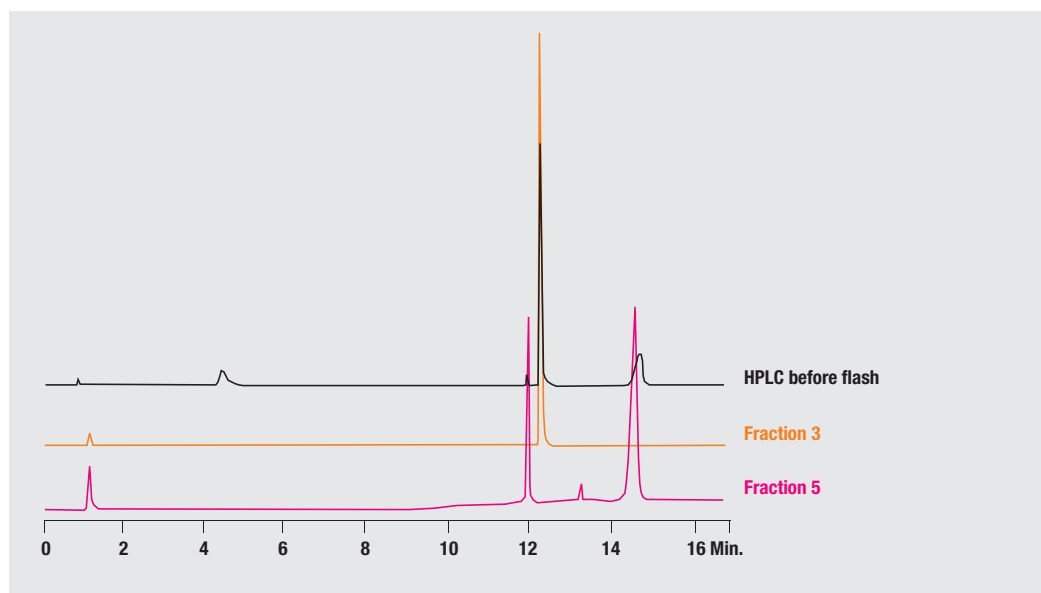
Step	Time (min.)	%B
1	0	0
2	8.1	30
3	3.6	70
4	2.4	100
5	2.9	100
6	1	0
7	1	0



Results and Discussion



Separation of chromophoric and non-chromophoric compounds in giant knotweed flash chromatography.



HPLC Chromatograms of giant knotweed fractions collected by Reveleris[®] flash chromatography.

Conclusion

Using the proposed procedure with the Reveleris[®] instrument and Reveleris[®] RP cartridges, the separation and isolation of chromophoric and non-chromophoric compounds in giant knotweed rhizome extract can be easily achieved.

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