Grace Discovery Sciences

Reveleris® Flash System

Isolation and Purification of Ginsenosides from Red Panax Ginseng Extract

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® X2 automated flash chromatography instrument and Reveleris® reversed-phase cartridges can ease the process.

Flash Chromatography Conditions:

12 gram Reveleris® RP C18 cartridge

Flow Rate: 30mL/min

Cartridge Equilibration: 3 min.

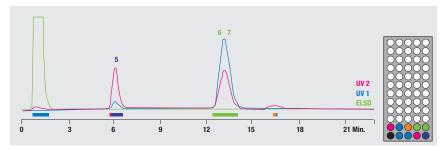
Slope Detection: Low ELSD Threshold: 3mV UV Threshold: 0.02AU UV1 Wavelength: 254nm UV2 Wavelength: 280nm Injection Type: Liquid

Solvent A: 0.5% Formic acid in Water

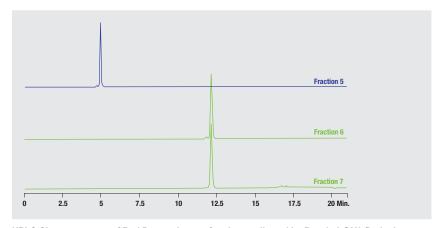
Solvent B: Methanol

Gradient: <u>Time</u>: 0 2 15 16 17 18 19

%B: 0 0 50 100 100 0 0



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



 $HPLC\ Chromatograms\ of\ Red\ Panax\ ginseng\ fractions\ collected\ by\ Reveler is {\tt §X2}\ flash\ chromatography.$

Conclusion

Using the proposed procedure with the Reveleris® X2 flash instrument and Reveleris® flash cartridges, the separation and isolation of ginsenosides in Red Panax Ginseng extract can be easily achieved.

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