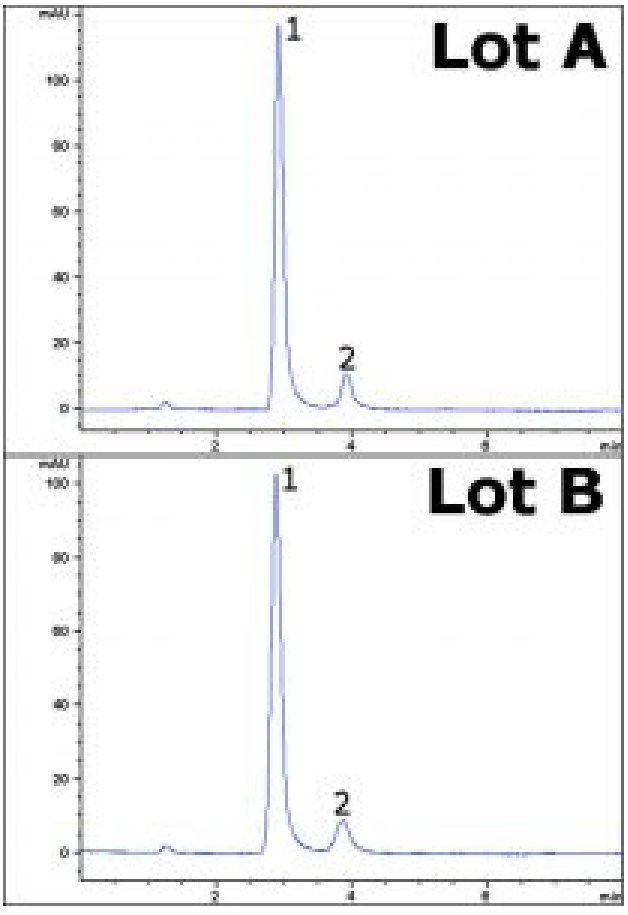
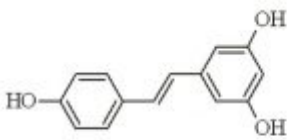
Resveratrol Capsule – AppNote

Isocratic Separation of Isomers

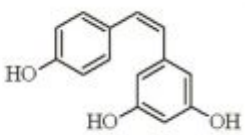
In this easy isocratic method, the cis and trans isomers of Resveratrol are separated using a near-UHPLC stationary phase. The Cogent Bidentate C18 2.o™ Column produces excellent efficiency for both analyte peaks. The sample used here is an actual capsule formulation, demonstrating the suitability of the column for real-world samples. With a more sophisticated detection methods such as LC-MS, the method could be applied to complex samples where Resveratrol may be present, such as red wine.

Below data is collected from two different stationary phase lots (A and B) to demonstrate reproducibility of the material.





1. trans-resveratrol



2. cis-resveratrol

Peaks:

1. trans-Resveratrol
2. cis-Resveratrol

Method Conditions

Column: Cogent Bidentate C18 2.o™, 2.2µm, 120Å

Catalog No.: 40218-05P-2

Dimensions: 2.1 x 50 mm

Mobile Phase: 75% DI Water / 25% Acetonitrile / 0.1% Formic Acid

Injection vol.: 0.2µL

Flow rate: 0.2mL / minute

Detection: UV @ 308nm

Sample: 100mg strength Resveratrol capsule contents were added to a 100 mL volumetric flask containing a portion of 50/50/0.1 DI Water / Acetonitrile / Formic Acid. Solution was then sonicated for 10 minutes and diluted to mark. After mixing, a portion was filtered with a 0.45µm Nylon Syringe Filter (MicroSolv Tech. Corp.)

t_0: 1.2 minutes

Note: *Resveratrol is a natural product found in the skin of red grapes and other sources. It has been reported to have anti-cancer, anti-aging, cardio-protective, and anti-diabetic effects.*

Attachment

No 330 Resveratrol Isomer Separation pdf 0.4 Mb Download File

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