

APPLICATIONS

Simple Sugars Analysis from Fruit Berries by LC-ELSD using Luna[®] Omega SUGAR LC Columns

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Overview

Berry fruits including Goji berry and Zante currant have increased in popularity due to their rich content of macronutrients, other phytochemicals, as well as sugars. Sugars have a major effect on the flavor of these berries as well as nutritional acceptance. Developed below, using the Luna Omega 3 μ m SUGAR LC column is the separation of simple sugars from Goji berries and Zante currants. Excellent separation of glucose and fructose is provided leading to accurate quantitation for effective monitoring of sugar content as well as flavor profiles.



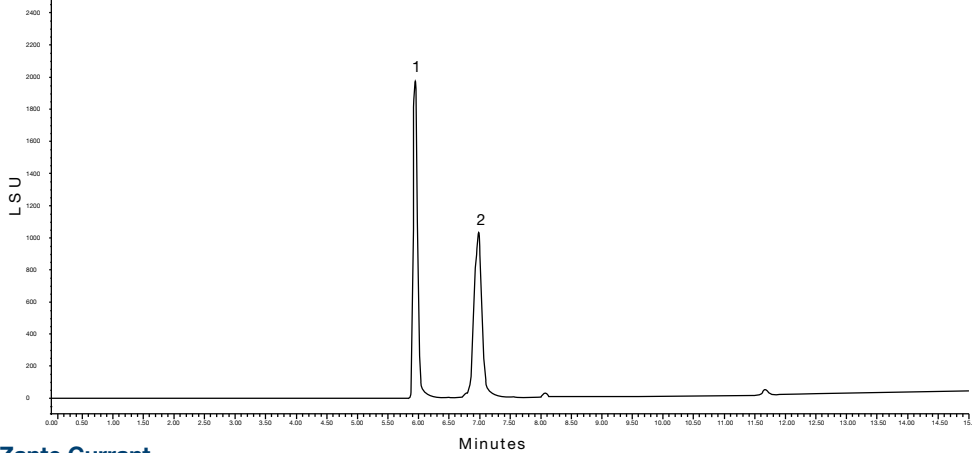
LC-ELSD Conditions

Column: Luna Omega 3 μ m SUGAR
Dimensions: 150 x 4.6 mm
Part No.: 00F-4775-E0
Mobile Phase: A: Water
B: Acetonitrile/IPA/Water (90:5:5)
Gradient:

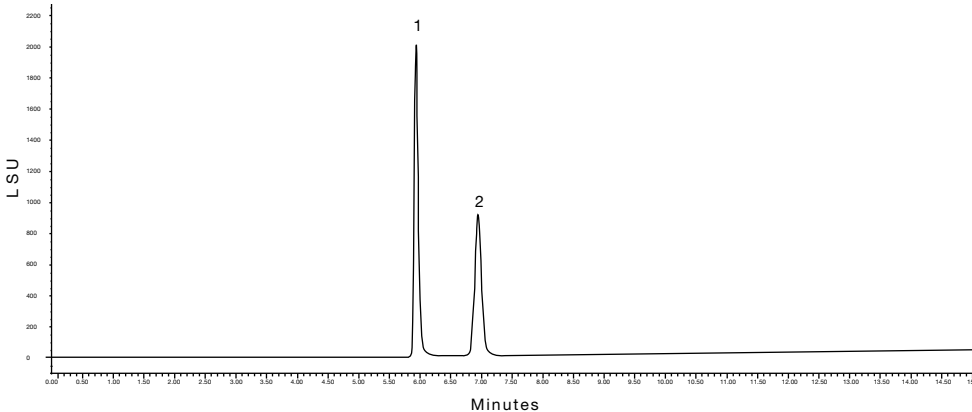
Time (min)	% B
0	90
0.5	90
15.5	70
17	70
18	90
20	90

Flow Rate: 1 mL/min
Injection Vol: 0.2 μ L
Temperature: 35 $^{\circ}$ C
Detection: ELSD
Sample: 1. Fructose
2. Glucose

Goji Berry



Zante Currant



Luna® Omega Sugar Ordering Information

3 µm Minibore Columns (mm)				SecurityGuard™ Cartridges (mm)
Phases	50 x 2.1	100 x 2.1	150 x 2.1	4 x 2.0*
SUGAR	00B-4775-AN	00D-4775-AN	00F-4775-AN	AJ0-4496 for ID: 2.0-3.0 mm

3 µm MidBore™ Columns (mm)		Security Guard Cartridges(mm)
Phases	150 x 3.0	4 x 2.0*
SUGAR	00F-4775-Y0	AJ0-4496 for ID: 2.0-3.0 mm

3 µm Analytical Columns (mm)				SecurityGuard Cartridges (mm)
Phases	100 x 4.6	150 x 4.6	250 x 4.6	4 x 3.0*
SUGAR	00D-4775-E0	00F-4775-E0	00G-4775-E0	AJ0-4495 for ID: 3.2-8.0 mm

*SecurityGuard Standard Analytical Cartridges require holder, Part No.: KJ0-4282

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SecurityGuard is patented by Phenomenex. U.S. Patent No. 6,162,362.

CAUTION: this patent only applies to the analytical-sized guard cartridge holder, and does not apply to SemiPrep, PREP or ULTRA holders, or to any cartridges.

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