

APPLICATIONS

15 Sugars Analyzed by LC-RI using Luna[®] Omega SUGAR LC Columns

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Column: Luna Omega 3 μm SUGAR
Dimensions: 150 x 4.6 mm
Part No.: 00F-4775-E0
Elution Type: Isocratic
Mobile Phase: Acetonitrile/Water (80:20)
Flow Rate: 1.5 mL/min
Temperature: 25°C
System: Agilent[®] 1100
Detection: RI

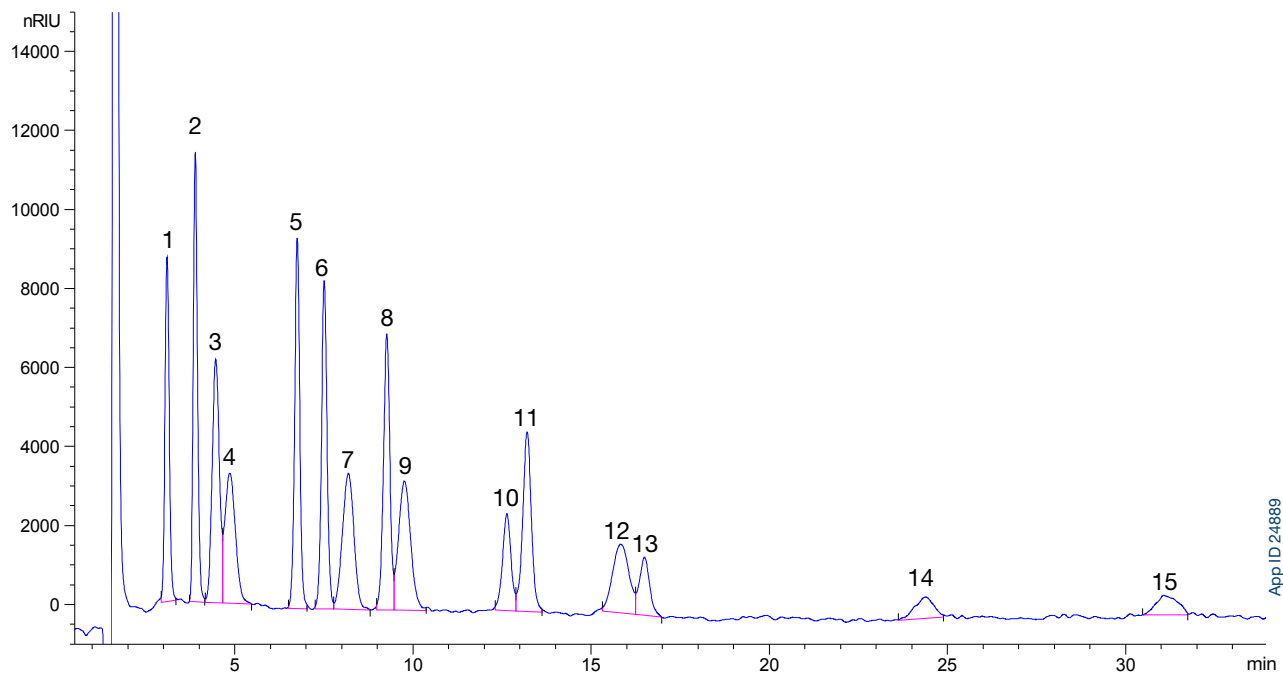
Sample:	Analyte	Retention Time (min)
1.	Xylose	3.095
2.	Fructose	3.887
3.	Glucose	4.462
4.	Galactose	4.857
5.	Sucrose	6.749
6.	Turanose	7.506
7.	Maltose	8.186
8.	Trehalose	9.264
9.	Lactose	9.758
10.	Eriose	12.634
11.	Melezitose	13.203
12.	Maltotriose	15.828
13.	Rafinose	16.496
14.	Isomaltotriose	24.392
15.	Maltotetrose	31.071

Overview

Sugars are critical components/ingredients in many food and beverage products. Monitoring their presence and quantity is crucial for both label claim verification as well as quality in manufacturing. Developed below is a method for 15 sugars with great separation between various monosaccharides, disaccharides, and oligosaccharides.

Acknowledgement

We would like to provide special thanks to Columbia Food Labs for contributing this application.



App ID 24889

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*
				/10pk
SUGAR	00B-4775-AN	00D-4775-AN	00F-4775-AN	AJO-4496

for ID: 2.0-3.0 mm

3 µm MidBore [™] Columns (mm)		SecurityGuard [™] Cartridges (mm)
Phases	150 x 3.0	4 x 2.0*
		/10pk
SUGAR	00F-4775-Y0	AJO-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*
				/10pk
SUGAR	00D-4775-E0	00F-4775-E0	00G-4775-E0	AJO-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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