SHIMADZU
Excellence in Science

CoreFocus Report

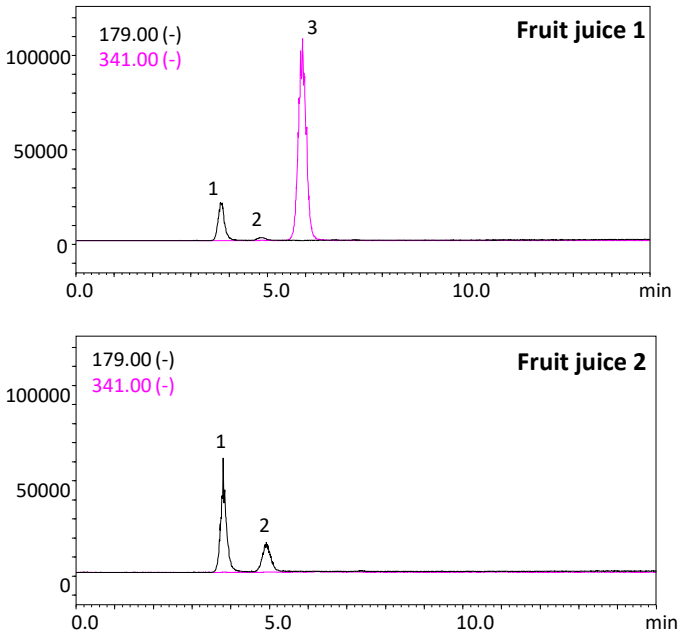
No.654

LC-MS | Hydrophilic Interaction (HILIC) | Shim-pack™ Series

Shim-pack Mix-HILIC

Analysis of Monosaccharides in Fruit Juice

Keywords: Sugar, Monosaccharides, Soft drink, Fruit juice, Food



1. Fructose
2. Glucose
3. Sucrose

System	:	Nexera™ X3	Ionization	:	ESI/APCI (DUIS) negative
Column	:	Shim-pack Mix-HILIC 150 mm x 2.1 mm I.D., 5 µm*1	Interface voltage	:	-2.0 kV
Mobile phases	:	A: 40 mmol/L ammonium bicarbonate solution B: Acetonitrile	Mode	:	SIM
Flow rate	:	0.3 mL/min	Nebulizing gas	:	3.0 L/min
Time program	:	75% (0 min) → 60% (15 min) → 75% (15.01-20 min)	Drying gas	:	5.0 L/min
Sample solvent	:	60% acetonitrile	Heating gas	:	7.0 L/min
Column oven temp.	:	45°C	Desolvation Temp.	:	400 °C
Injection vol.	:	1 µL	DL Temp.	:	150 °C
Vial	:	Shim-vial S*2			
Syringe Filter	:	TORAST Disc (hydrophilic PTFE, 13 mm diameter, 0.22 µm pore size)*3			

1*: P/N : 227-32751-01, 2* : P/N : 227-34500-51, 3*: P/N : GLCTD-HPTFE1322

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