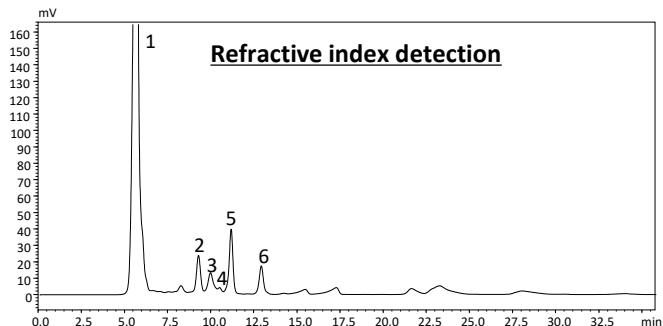


CoreFocus
Report
No.550

LC

Size exclusion mode and Sodium-based ligand exchange mode

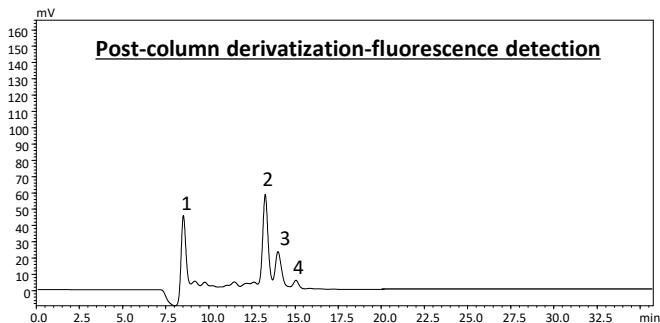
Shim-pack Series

Shim-pack™ SUR-Na
Chromatographic elution pattern of Soy sauce
Keywords: Retention index, Sugars, Food


1. Anionic components such as acetic acid and chloride and polysaccharides (around exclusion limit)
2. Glucose
3. Galactose
4. Arabinose
5. Glycerol
6. Ethanol, etc. (around penetration limit)

The sample was ultrafiltered and diluted 10 times with water and measured.

Instrument	:	Nexera™ lite
Column	:	Shim-pack SUR-Na (250 mm x 7.8 mm I.D., 8 µm) 1 pc, P/N : 228-59529-01
Guard column	:	Shim-pack SUR-Na (G) (50 mm x 7.8 mm I.D., 8 µm), P/N : 228-59529-02
Mobile phase	:	Water
Flow rate	:	0.7 mL/min
Column temp.	:	80°C
Injection volume	:	10 µL
Detector	:	Refractive index detector RID-20A



1. Polysaccharides (around exclusion limit)
2. Glucose
3. Galactose
4. Arabinose

Instrument	:	Nexera™ reducing sugar analysis system
Flow rate (Mobile phase)	:	0.6 mL/min
(Columns, Mobile phase, Column temp., Inj. vol. and sample solution are the same as refractive index detection.)		
Reaction solution	:	10 g/L L-Arginine, 30 g/L Boric acid aqueous solution
Flow rate (Reaction solution)	:	0.5 mL/min
Reaction tube	:	SUS, 8 m L x 0.5 mm i.d.
Reaction temp.	:	150°C
Detector	:	Spectrofluorometric detector RF-20Axs Ex 320 nm, Em 430 nm

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