

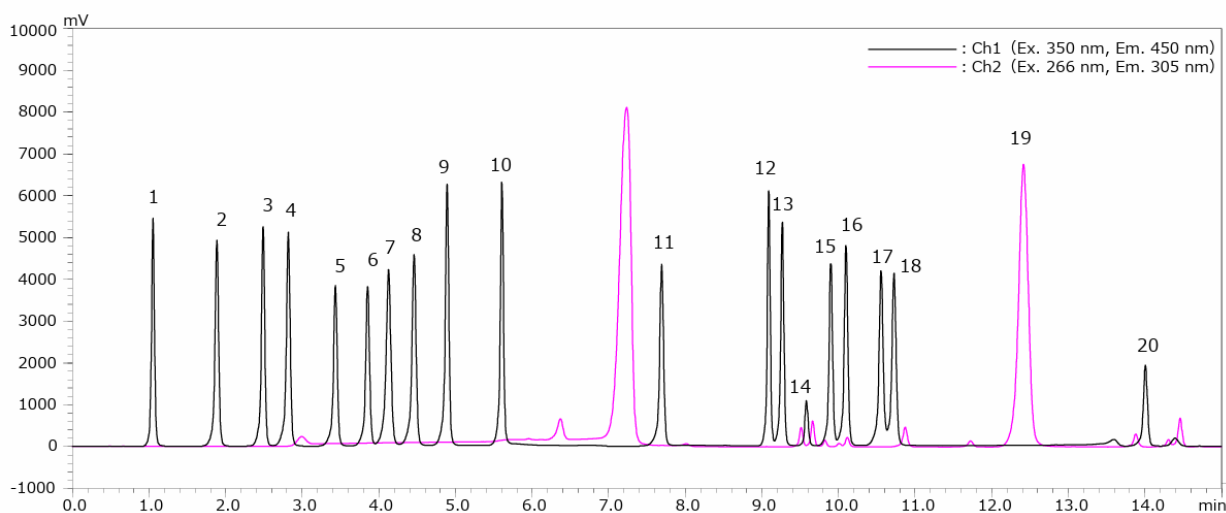
CoreFocus
Report
No.442

LC Reversed phase Shim-pack Series

Shim-pack™ XR-ODSII

High-speed analysis of amino acids

Keywords: pre-column derivatization, proteinogenic amino acid, automatic pretreatment function



- | | |
|------------------|-------------------|
| 1. Aspartic Acid | 11. Tyrosine |
| 2. Glutamic Acid | 12. Methionine |
| 3. Asparagine | 13. Valine |
| 4. Serine | 14. Cystine |
| 5. Glutamine | 15. Tryptophan |
| 6. Histidine | 16. Phenylalanine |
| 7. Glycine | 17. Isoleucine |
| 8. Threonine | 18. Leucine |
| 9. Arginine | 19. Proline |
| 10. Alanine | 20. Lysine |

Column	: Shim-pack XR-ODSII, (100 mm L x 3.0 mm I.D., 2.2 μm), P/N : 228-41624-92
Mode	: Low pressure gradient
Mobile phase	: A) 20mmol/L Sodium acetate buffer(pH6) B) Water/Acetonitrile = 100/900 (v/v) C) 20 mmol/L Sodium acetate buffer (pH 5) containing 0.5 mmol/L EDTA-2Na
Flow rate	: 1.0 mL/min
Column temp.	: 40 °C
Injection vol.	: 1 μL
Sample cooler	: 4 °C
Detection	: Fluorescence detector(Cell temp. : 25 °C) Ch1) Ex. 350 nm, Em. 450 nm, Ch2) Ex.266 nm, Em. 305 nm

Table Time Program			
Time (min)	A.conc	B.conc	C.conc
0	95	5	0
0.2	93	7	0
1	93	7	0
4	87	13	0
5	0	15	85
7.5	0	30	70
12	0	35	65
14	0	45	55
14.01	0	95	5
17	0	95	5
17.01	95	5	0
19.5	95	5	0

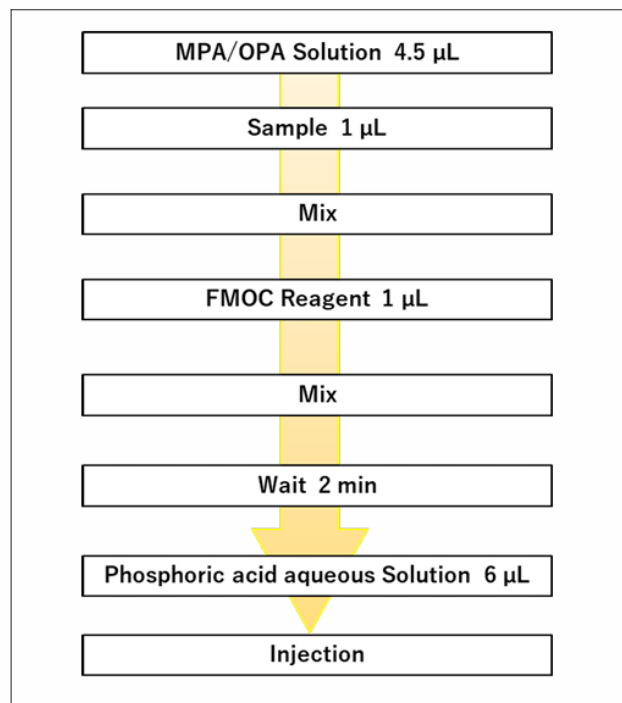


Fig. Flowchart of Automated Pre-Column Derivatization

Source : Application News an_01-00441 [\(JP, ENG\)](#)

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