ERAS-1000-0161A

SHIMADZU
Excellence in Science

CoreFocus Report

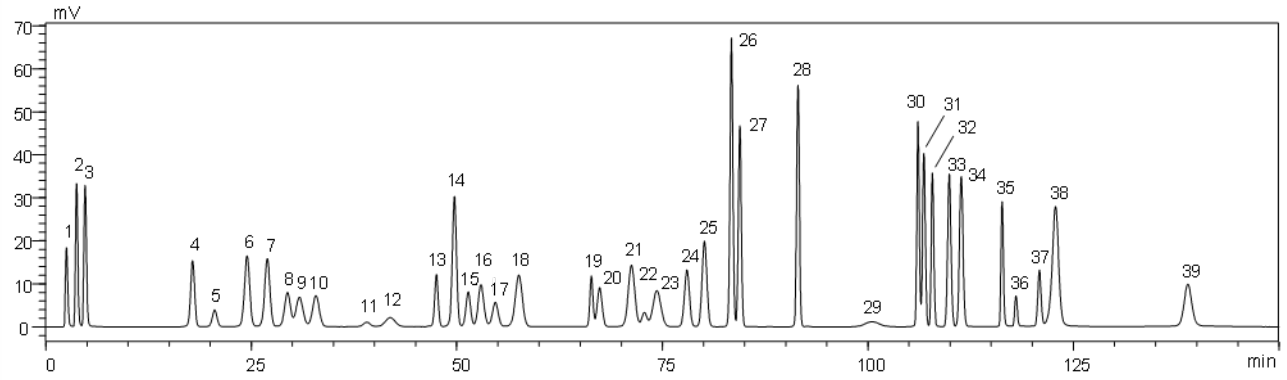
No.161A

LC | Ion-exchange | Shim-pack Series

Shim-pack™ Amino-Li

Analysis of Free Amino Acids under Li Type Condition

Keywords: post-column derivatization, OPA, *o*-phthalaldehyde



1. *o*-Phosphoserine
2. Taurine
3. *o*-Phosphoethanolamine
4. Aspartic acid
5. Hydroxyproline
6. Threonine
7. Serine
8. Asparagine
9. Glutamic acid
10. Glutamine
11. Sarcosine
12. *α*-Aminoadipic acid
13. Proline
14. Glycine
15. Alanine
16. Citrulline
17. *α*-Amino-n-butyric acid
18. Valine
19. Cystine
20. Methionine
21. Isoleucine
22. Cystathionine
23. Leucine
24. Tyrosine
25. Phenylalanine
26. *β*-Alanine
27. *β*-Aminoisobutyric acid
28. *γ* –Aminobutyric acid (GABA)
29. Tryptophan
30. Histidine
31. 3-Methylhistidine
32. 1-Methylhistidine
33. Carnosine
34. Anserine
35. Hydroxylysine
36. Ornithine
37. Lysine
38. Ammonia
39. Arginine

1-3,12,17 and 22 : 0.05 mmol/L
11 : 0.25 mmol/L
29 : 0.026 mmol/L
The others : 0.1 mmol/L

System	:	Nexera™ Post-Column Amino Acid Analysis System
Column	:	Shim-pack Amino-Li (100 mm x 6.0 mm I.D., 5 µm) , P/N : 228-18837-92
Ammonia trap column	:	Shim-pack ISC-30/S0504Li (50 mm × 4.0 mm I.D.), P/N : 228-00821-91
Mobile phase	:	Amino Acid Mobile Phase Kits (Li type), P/N : 228-21195-95 Gradient elution
Flow rate	:	0.6 mL/min
Column temp.	:	39 ˚C
Injection vol.	:	10 µL
Vial	:	Shimadzu vials, LC, 1.5 mL, glass
Reaction reagent	:	Amino Acid Reagent Kits
Flow rate of reagent	:	0.2 mL/min for each
Reaction temp.	:	39 ˚C
Detection	:	Fluorescence, Ex. 350 nm Em. 450 nm

Source : Application News L568A (JP, ENG)

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