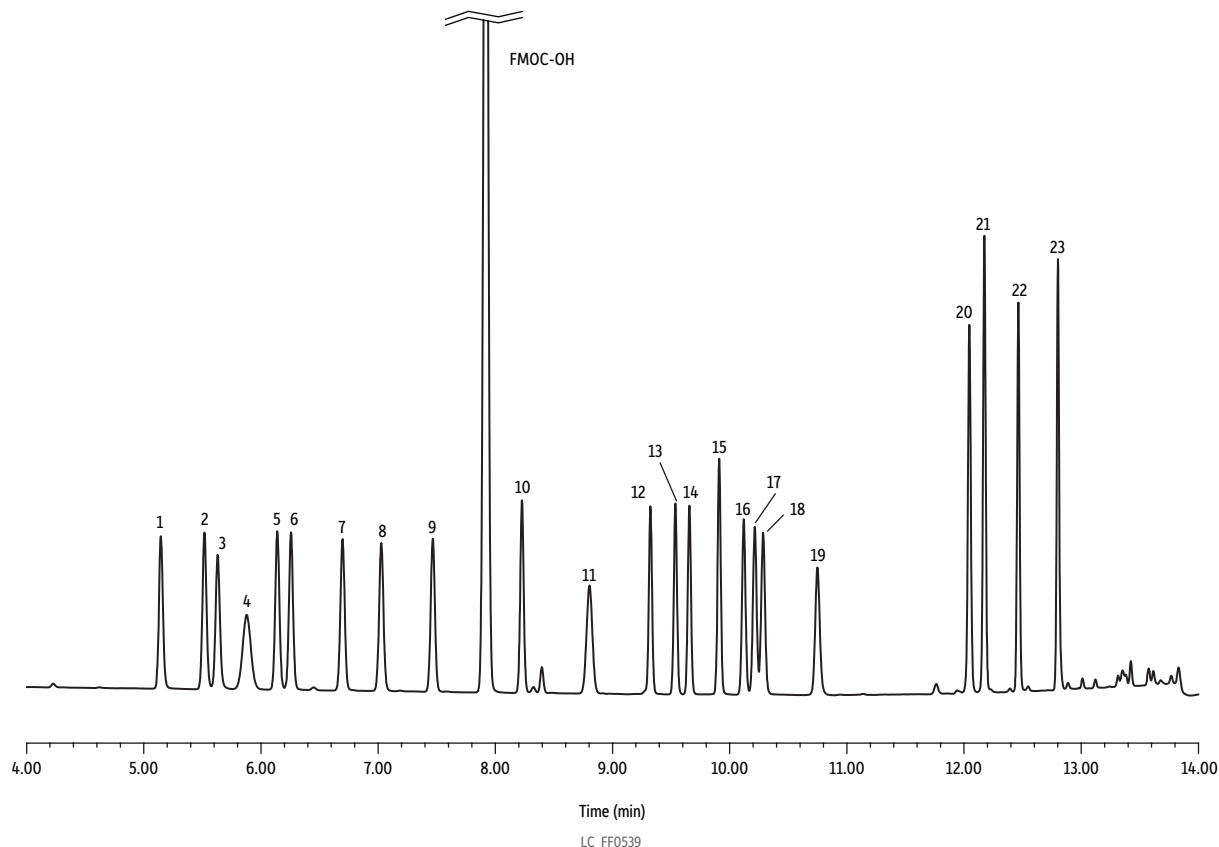
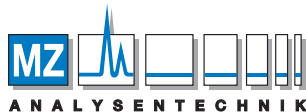


# Amino Acids (9-Fluorenylmethyl-Chloroformate Derivatives) on Raptor ARC-18



| Peaks                                   | tr (min) | Conc. (µmole/mL) | Column             | Dimensions:  | Raptor ARC-18 (cat.# 9314A1E)   |     |
|---|----------|------------------|--------------------|--|---|-----|
| 1. Arginine (Arg)                       | 5.145    | 0.4              | Particle Size:     | 100 mm x 3 mm ID   | 100 mm x 3 mm ID  |     |
| 2. Asparagine (Asn)                     | 5.518    | 0.4              | Temp.:             | 2.7 µm   | 2.7 µm  |     |
| 3. Glutamine (Gln)                      | 5.630    | 0.4              | Standard/Sample    | 30 °C  | 30 °C   |     |
| 4. <i>trans</i> -4-Hydroxyproline (Hyp) | 5.878    | 0.4              | Diluent:           | 0.1 N HCl  | 0.1 N HCl   |     |
| 5. Serine (Ser)                         | 6.139    | 0.4              | Conc.:             | 0.4 µmole/mL for each amino acid (0.2 µmole/mL for cystine)  | 0.4 µmole/mL for each amino acid (0.2 µmole/mL for cystine)           |     |
| 6. Aspartic acid (Asp)                  | 6.256    | 0.4              | Inj. Vol.:         | 1 µL   | 1 µL  |     |
| 7. Glutamic acid (Glu)                  | 6.696    | 0.4              | Mobile Phase       |  |   |     |
| 8. Threonine (Thr)                      | 7.027    | 0.4              | A:                 | 0.1% Formic acid + 20 mM ammonium formate in water   | 0.1% Formic acid + 20 mM ammonium formate in water                    |     |
| 9. Glycine (Gly)                        | 7.466    | 0.4              | B:                 | 0.1% Formic acid + 10 mM ammonium formate in 90:10 acetonitrile:water  | 0.1% Formic acid + 10 mM ammonium formate in 90:10 acetonitrile:water |     |
| 10. Alanine (Ala)                       | 8.227    | 0.4              | Time (min)         | Flow (mL/min)  | %A  | %B  |
| 11. Proline (Pro)                       | 8.803    | 0.4              | 0.00               | 0.8  | 80  | 20  |
| 12. Methionine (Met)                    | 9.324    | 0.4              | 6.25               | 0.8  | 60  | 40  |
| 13. Valine (Val)                        | 9.537    | 0.4              | 9.00               | 0.8  | 40  | 60  |
| 14. Norvaline                           | 9.656    | 0.4              | 10.00              | 0.8  | 40  | 60  |
| 15. Tryptophan (Trp)                    | 9.910    | 0.4              | 13.00              | 0.8  | 0   | 100 |
| 16. Phenylalanine (Phe)                 | 10.120   | 0.4              | 13.01              | 0.8  | 80  | 20  |
| 17. Isoleucine (Ile)                    | 10.214   | 0.4              | 15.00              | 0.8  | 80  | 20  |
| 18. Leucine (Leu)                       | 10.285   | 0.4              |                    |  |   |     |
| 19. Cystine                             | 10.749   | 0.2              | Detector           | UV/Vis @ 265, 4.8 nm   |   |     |
| 20. Histidine (His)                     | 12.045   | 0.4              | Instrument         | Waters ACQUITY UPLC H-Class  |   |     |
| 21. Lysine (Lys)                        | 12.174   | 0.4              | Sample Preparation | Derivatization reaction: 50 µL amino acid mix + 100 µL 0.2 N borate buffer (pH 10.0) + 50 µL 15 mM 9-fluorenylmethyl-chloroformate solution + 50 µL acetonitrile. The injection can be performed after 5 minutes of reaction time. |   |     |
| 22. Cysteine (Cys)                      | 12.463   | 0.4              |                    |  |   |     |
| 23. Tyrosine (Tyr)                      | 12.801   | 0.4              |                    |  |   |     |

Amino acids are analyzed as 9-fluorenylmethyl-chloroformate derivatives.



## AUTHORIZED DISTRIBUTOR

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