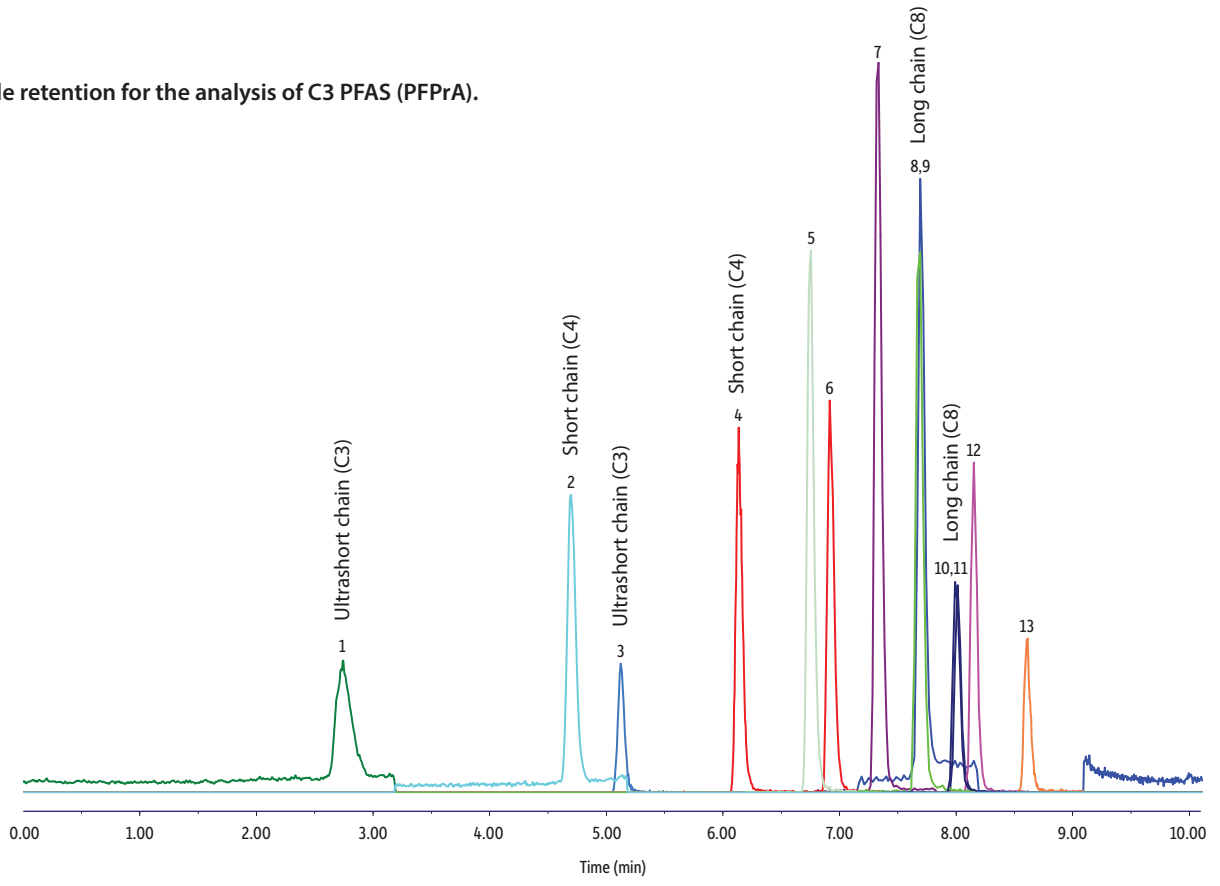
## Ultra-short Chain, Legacy, and Alternative PFAS on Raptor C18 in Reagent Water

• Suitable retention for the analysis of C3 PFAS (PFPrA).




LC_EV0555

| Peaks | $t_R$ (min) | Conc. (ng/L) | Precursor Ion | Product Ion |
|---|---|---|---|---|
| 1. Perfluoropropanoic acid (PFPrA) | 2.74 | 80 | 162.9 | 119.0 |
| 2. Perfluorobutanoic acid (PFBA) | 4.69 | 80 | 212.8 | 169.0 |
| 3. Perfluoropropanesulfonic acid (PFPrS) | 5.13 | 80 | 248.8 | 79.6 |
| 4. Perfluorobutanesulfonic acid (PFBS) | 6.14 | 80 | 298.8 | 79.9 |
| 5. Perfluoro-*n*-[1,2-$^{13}C_2$]hexanoic acid ($^{13}C_2$-PFHxA) | 6.75 | 50 | 314.9 | 270.0 |
| 6. Hexafluoropropylene oxide-dimer acid (HFPO-DA) | 6.92 | 80 | 285.0 | 168.9 |
| 7. Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA) | 7.33 | 80 | 376.9 | 250.7 |
| 8. Perfluorooctanoic acid (PFOA) | 7.70 | 80 | 413.1 | 368.9 |
| 9. Perfluoro-[1,2-$^{13}C_2$]octanoic acid ($^{13}C_2$-PFOA) | 7.70 | 50 | 415.0 | 370.0 |
| 10. Perfluorooctanesulfonic acid (PFOS) | 8.01 | 80 | 498.8 | 80.0 |
| 11. Perfluoro-[1,2,3,4-$^{13}C_4$]octanesulfonic acid ($^{13}C_4$-PFOS) | 8.01 | 50 | 503.0 | 80.0 |
| 12. 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS) | 8.15 | 80 | 530.8 | 350.7 |
| 13. 11-Chloroeicosafluoro-3-oxanonane-1-sulfonate (11Cl-PF3OUdS) | 8.61 | 80 | 630.7 | 451.0 |

**Column** Raptor C18 (cat.# 9304A1E)
Dimensions: 100 mm x 3 mm ID
Particle Size: 2.7 µm
Guard Column: 90 Å
Temp.: 40 °C
**Sample**
Conc.: 80 ppt
Inj. Vol.: 10 µL
**Mobile Phase**
A: Water, 5 mM ammonium acetate
B: Methanol

| Time (min) | Flow (mL/min) | %A | %B |
|---|---|---|---|
| 0.00 | 0.25 | 80 | 20 |
| 7.00 | 0.25 | 5 | 95 |
| 9.00 | 0.25 | 5 | 95 |
| 9.01 | 0.25 | 80 | 20 |
| 11.0 | 0.25 | 80 | 20 |

**Detector** MS/MS
Ion Mode: ESI-
Mode: MRM
**Instrument** UHPLC
**Notes** A PFAS delay column (cat.# 27854) was installed between the pump mixer and the injector.

In a polypropylene vial, 250 µL of reagent water (fortified at 80 ppt) was mixed with 250 µL of 40:60 reagent water:methanol and 5 µL of internal standard solution (5 ng/mL of $^{13}C_2$-PFHxA, $^{13}C_2$-PFOA, $^{13}C_4$-PFOS in methanol). The vial was capped with a polyethylene cap prior to analysis.



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