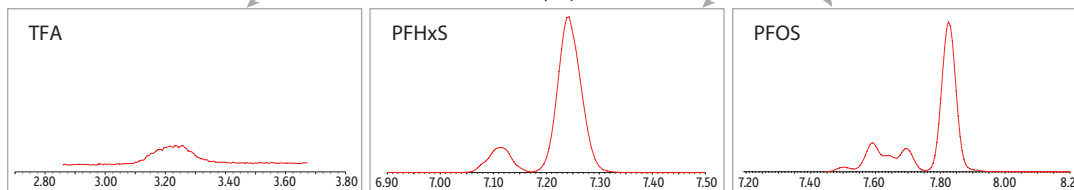
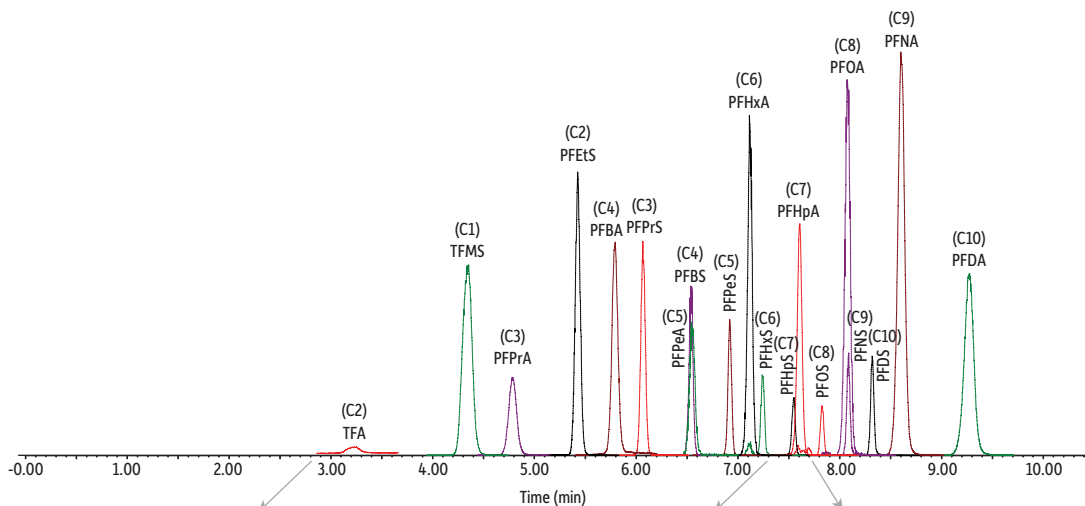
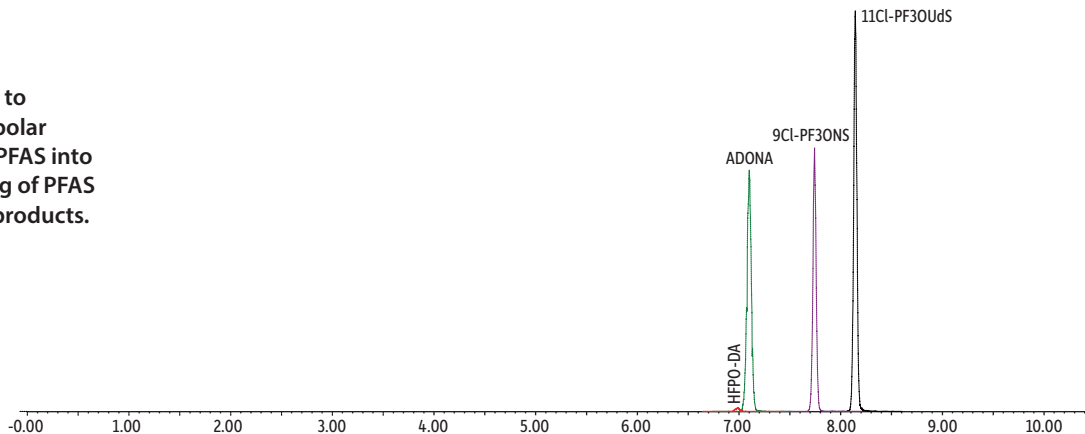


Simultaneous Analysis of C1 to C10 PFAS and Alternative Compounds on Ultra IBD

Unique workflow to integrate highly polar ultrashort-chain PFAS into the biomonitoring of PFAS in human blood products.



LC_CF0812

Column Ultra IBD (cat.# 9175312)
Dimensions: 100 mm x 2.1 mm ID
Particle Size: 3 µm
Pore Size: 100 Å
Temp.: 40 °C
Standard/Sample PFAS 28 calibration standard (cat.# 30734)
Diluent: 1:2 water:methanol
Conc.: 10 ng/mL
Inj. Vol.: 5 µL
Mobile Phase
A: Water, 5 mM ammonium formate, 0.1% formic acid
B: Acetonitrile

Time (min)	Flow (mL/min)	%A	%B
0.00	0.3	80	20
7.00	0.3	5	95
9.00	0.3	5	95
9.01	0.3	80	20
11.00	0.3	80	20

Peaks	tr (min)	Precursor Ion	Quantification Ion	Confirmation Ion
1. Trifluoroacetic acid (TFA)	3.25	113.03	69.01	
2. Trifluoromethanesulfonic acid (TFMS)	4.37	148.97	79.93	98.92
3. Perfluoropropanoic acid (PFPrA)	4.81	162.97	119.02	
4. Perfluoroethanesulfonic acid (PFETs)	5.44	198.90	79.92	98.91
5. Perfluorobutanoic acid (PFBA)	5.80	213.03	168.98	
6. Perfluoropropanesulfonic acid (PFPrS)	6.08	248.97	79.92	98.91
7. Perfluorobutanesulfonic acid (PFBS)	6.55	298.97	79.97	98.89
8. Perfluoropentanoic acid (PFPeA)	6.56	262.97	218.97	
9. Perfluoropentanesulfonic acid (PFPeS)	6.93	349.10	79.98	98.98
10. Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.01	285.03	169.02	185.02
11. 4,8-dioxo-3H-perfluorononanoic acid (ADONA)	7.11	376.90	250.93	84.97
12. Perfluorohexanoic acid (PFHxA)	7.13	313.10	268.97	118.99
13. Perfluorohexanesulfonic acid (PFHxS)	7.24	398.90	79.97	98.89
14. Perfluoroheptanesulfonic acid (PFHpS)	7.56	449.17	79.98	98.97
15. Perfluoroheptanoic acid (PFHpA)	7.62	363.16	319.09	169.06
16. 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	7.75	530.78	350.85	82.96
17. Perfluorooctanesulfonic acid (PFOS)	7.82	499.03	79.92	98.90
18. Perfluorononanesulfonic acid (PFNS)	8.09	549.10	79.92	98.83
19. Perfluorooctanoic acid (PFOA)	8.10	413.10	368.96	168.90
20. 11-Chloroicosadecafluoro-3-oxadecane-1-sulfonic acid (11Cl-PF30UdS)	8.15	630.78	450.80	82.95
21. Perfluorodecanesulfonic acid (PFDS)	8.32	599.17	79.98	98.83
22. Perfluorononanoic acid (PFNA)	8.62	463.10	419.01	219.02
23. Perfluorodecanoic acid (PFDA)	9.29	513.17	469.16	219.06

Max Pressure: 275 bar
Detector: Waters Xevo TQ-S
Ion Mode: ESI-
Mode: MRM
Instrument: Waters ACQUITY UPLC I-Class
Sample Preparation: The standard solution (100 µL) was prepared in reverse osmosis water supplemented with 1x phosphate-buffered saline at 10 ng/mL (ppb) in a polypropylene HPLC vial followed by mixing with 200 µL of methanol containing 1.5% formic acid.

Notes: A PFAS delay column (cat.# 27854) was installed before the injector. The peaks of confirmation ions are not displayed in this chromatogram.

