

1. Flash conditions

Device: puriFlash[®] 5.250P

Solvents: A: Water + 0.1% TFA

B: Acetonitrile + 0.1% TFA

Column: PFB-15C18N-F0025

Flow rate: 15mL/min

Injection mode: Liquid

Injection volume: 150µL

Concentration: 20mg/mL

Crude sample: 3mg

Detection: UV 214nm (purple)

Mass XIC1 235-241m/z (Dark red)

Mass XIC2 377-383m/z (Orange)

Mass XIC3 571-577m/z (Green)

MassTIC 220-1200m/z (Blue)

ESI Source

Pressure: 5bar

Solvent make-up and dilution:

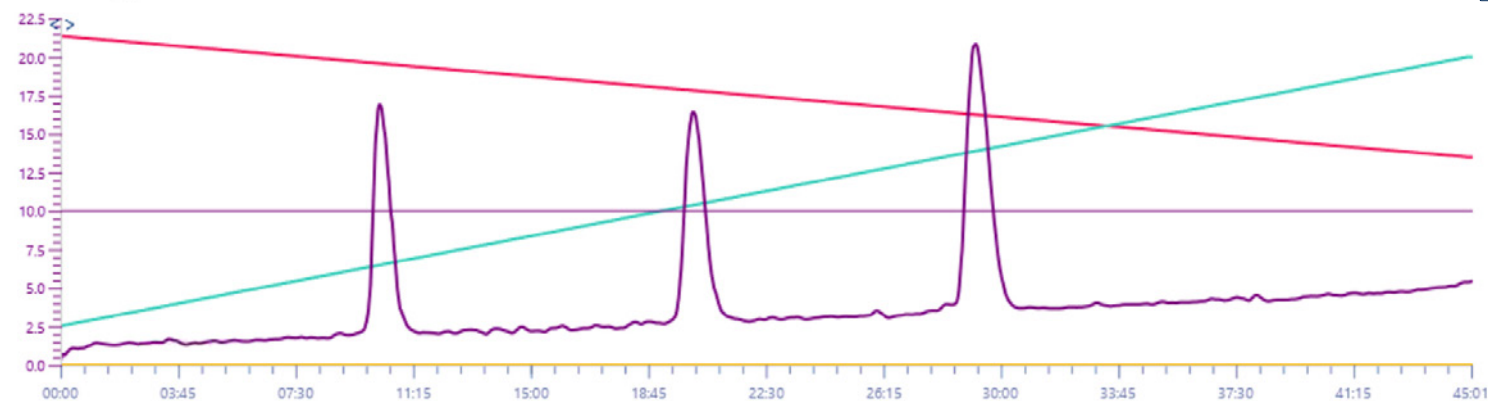
Test 1: Isopropanol

Test 2: Solution of Propionic Acid
in Isopropanol (25/75) (TFA-Fix)

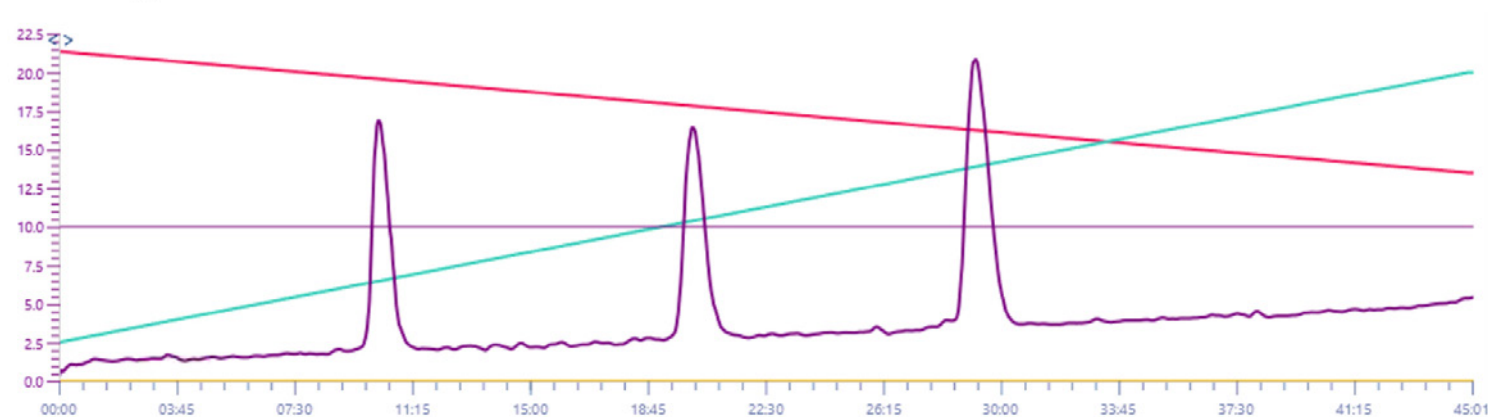
Elution conditions:

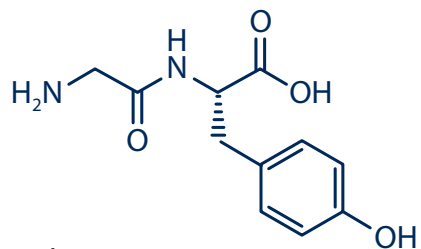
t (min)	A (%)	B (%)
00:00	95	5
45:00	60	40

UV signal without TFA Fix



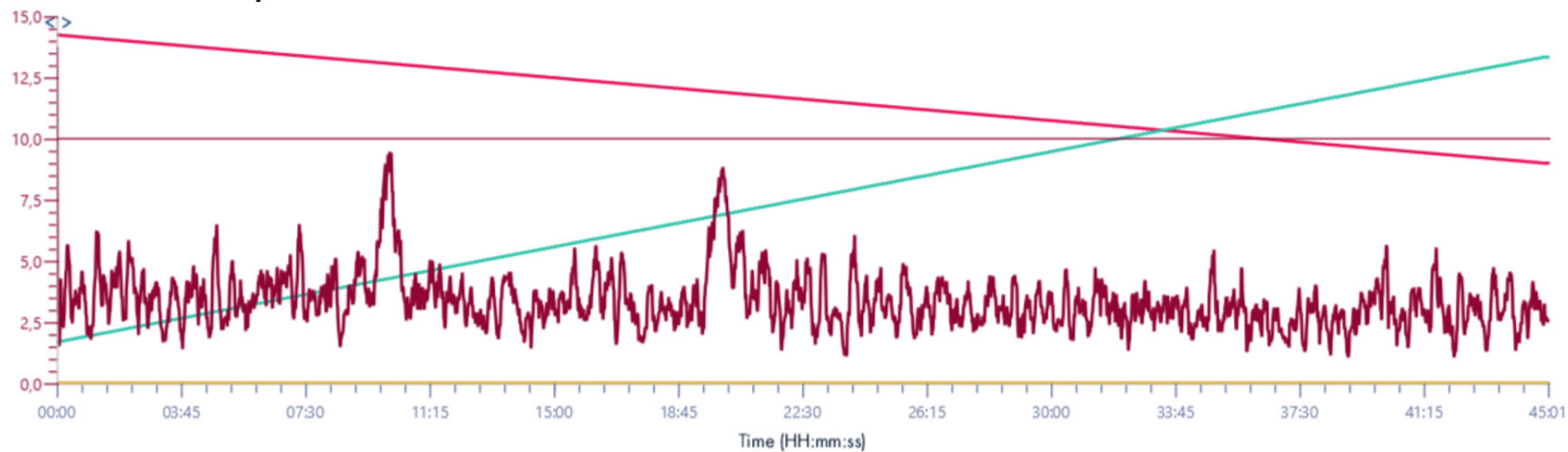
UV signal with TFA Fix



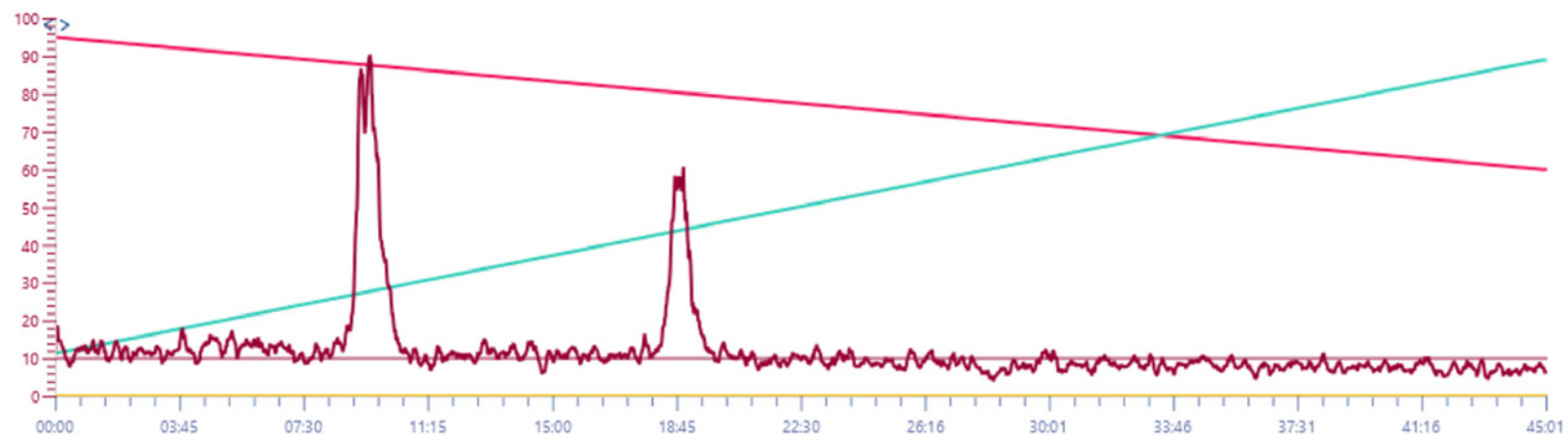


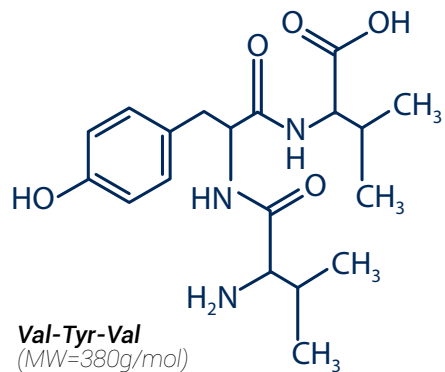
Gly – Tyr
(MW=238g/mol)

XIC 1 235-241m/z without TFA Fix

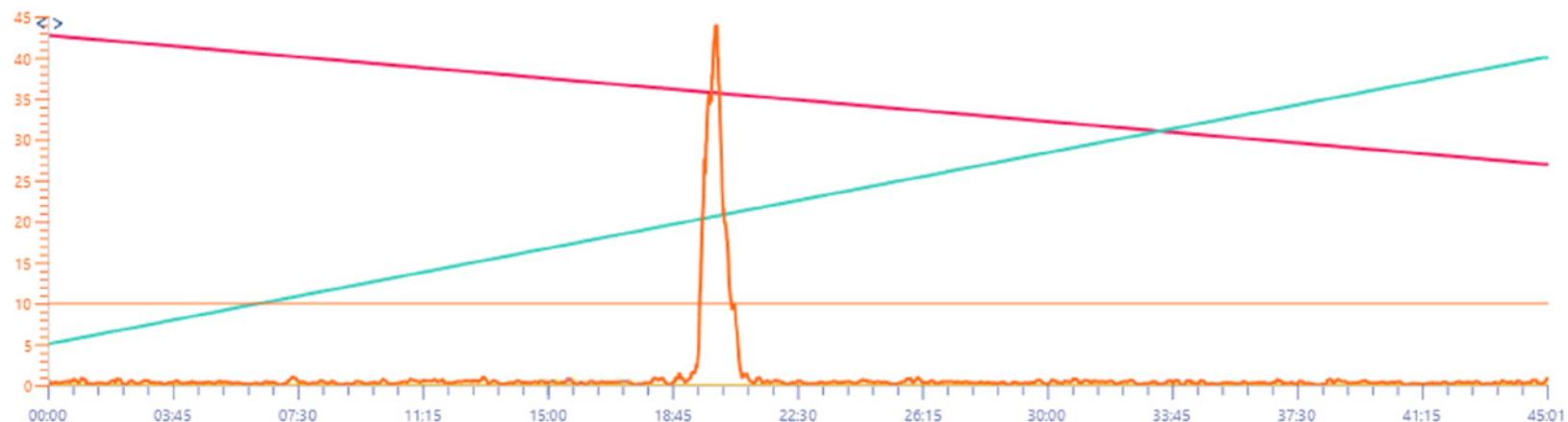


XIC 1 235-241m/z with TFA Fix

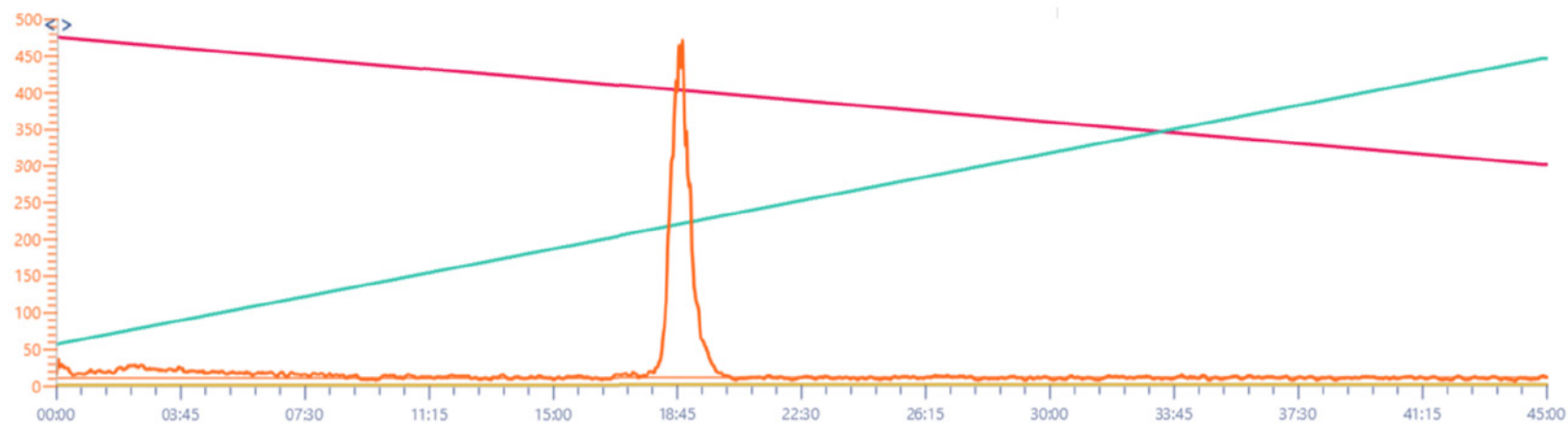


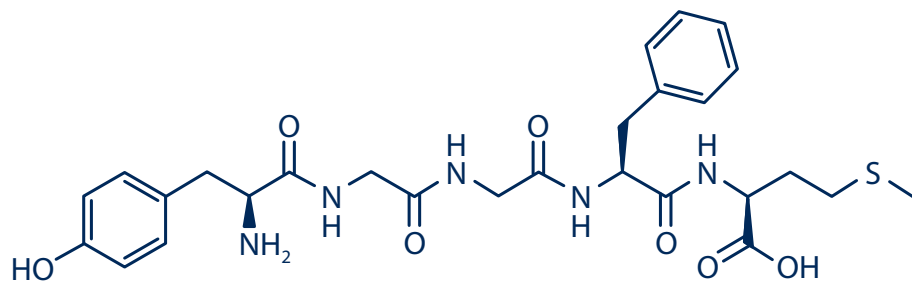


XIC 2: 377-383m/z without TFA Fix



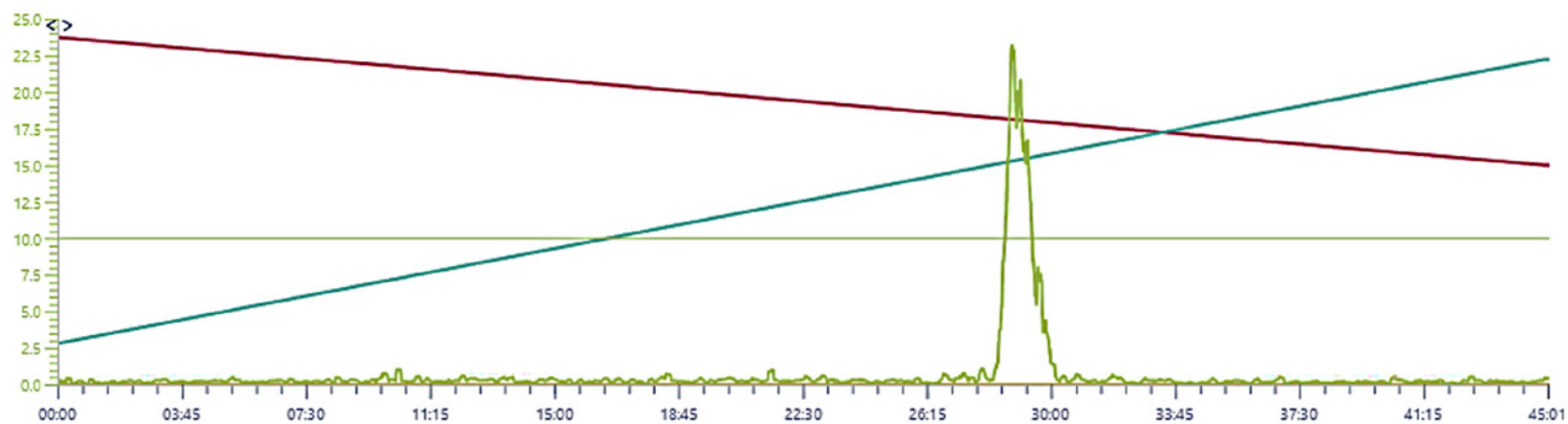
XIC 2: 377-383 with TFA Fix



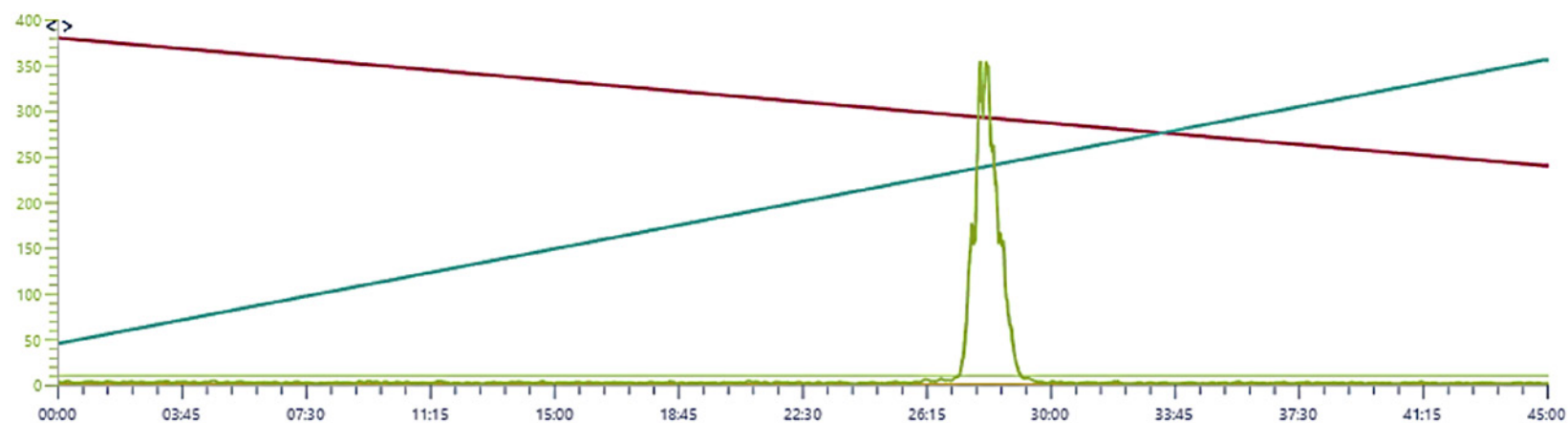


Met-Enkephalin
(MW=574g/mol)

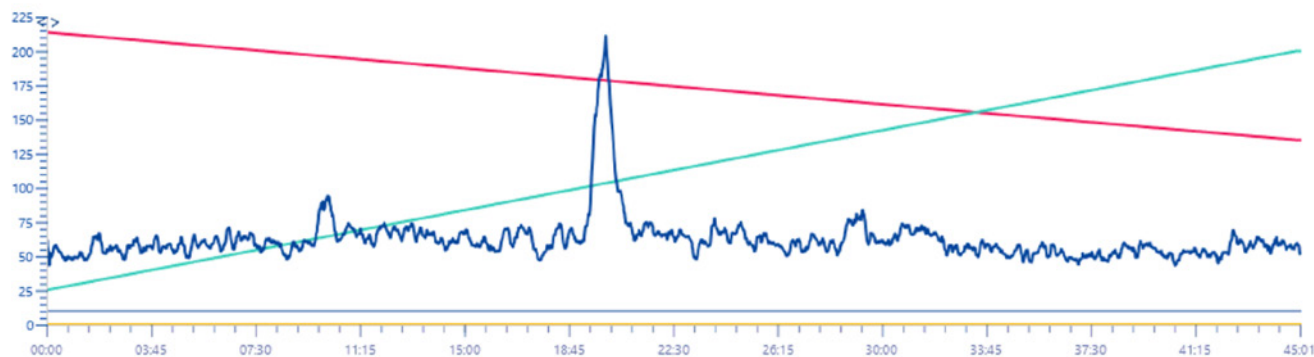
XIC 3: 571-577m/z without TFA Fix



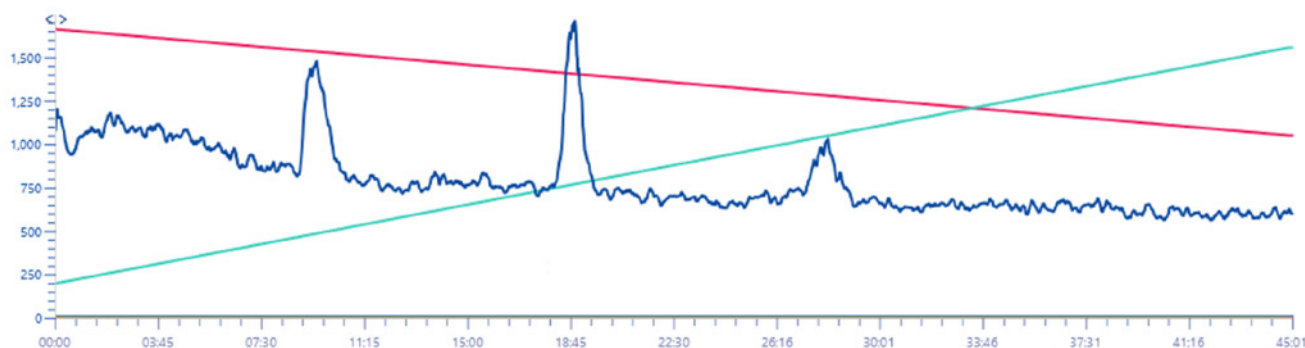
XIC 3: 571-577m/z with TFA Fix



TIC 220-1200m/z without TFA Fix



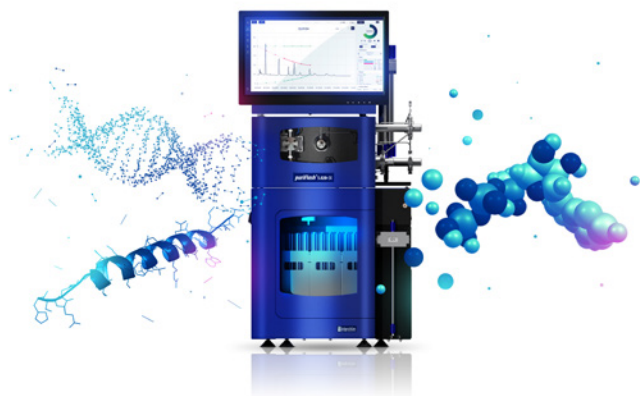
TIC 220-1200m/z with TFA Fix



Conclusion

TFA and Mass detector are not fully compatible.

Using propionic acid additive post-column will increase the signal by 10 and reduce the background noise to detect compounds.



To achieve this purification:

You will need

- puriFlash® 5.250P
[Discover it](#) [Add to card](#)
- puriFlash® MS
[Discover it](#) [Add to card](#)
- puriFlash® column PFB-15C18N-F0025
[Discover it](#) [Add to card](#)

We highly recommend

- Magic box Flash
 AXF7P0 [Add to card](#)
- Safety waste cap with container 20L + Filter
 B1SUK0 [Add to card](#)
- 16x150mm Rack
 AYHE40 [Add to card](#)