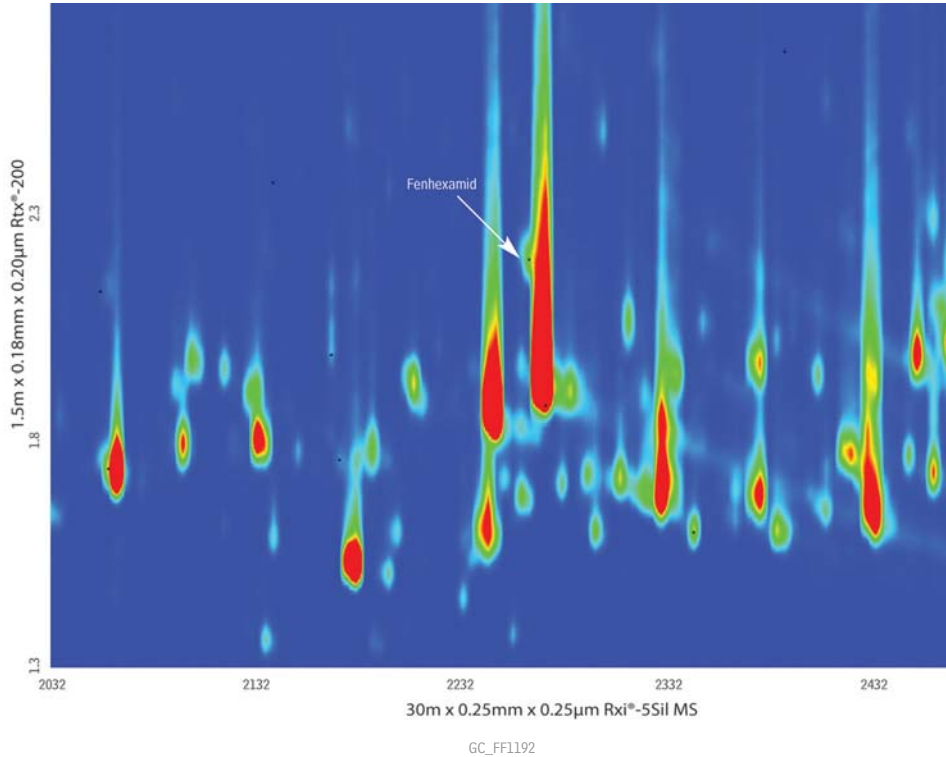


## Sage QuEChERS Extract Cleaned with Cartridge SPE (Zoom of GCxGC-TOFMS Contour Plot)

**GCxGC with orthogonal Rxi<sup>®</sup>-5Sil MS and Rtx<sup>®</sup>-200 columns is a powerful way to handle complex samples like dietary supplement extracts. Note separation of Fenhexamid from other interferences that have m/z 177.**



**Column** Rxi<sup>®</sup>-5Sil MS 30 m, 0.25 mm ID, 0.25 µm (cat.# 13623)  
Rtx<sup>®</sup>-200 1.5 m, 0.18 mm ID, 0.20 µm (cat.# 45001)

**Sample**  
Diluent: Toluene

**Injection**  
Inj. Vol.: 1 µL splitless (hold 1 min.)  
Liner: Gooseneck Splitless (4mm) w/Wool (cat.# 22405)  
Inj. Temp.: 250 °C  
Purge Flow: 40 mL/min.

**Oven**  
Oven Temp: Rxi<sup>®</sup>-5Sil MS: 80 °C (hold 1 min.) to 310 °C at 4 °C/min. (hold 1.5 min.)  
Rtx<sup>®</sup>-200: 90 °C (hold 1 min.) to 320 °C at 4 °C/min. (hold 1.5 min.)

Carrier Gas He, constant flow  
Flow Rate: 1.8 mL/min.

**Modulation**  
Modulator Temp. Offset: 25 °C  
Second Dimension Separation Time: 4 sec.  
Hot Pulse Time: 1.2 sec.  
Cool Time between Stages: 0.8 sec.

**Detector** TOFMS

Transfer Line Temp.: 290 °C  
Analyzer Type: TOF  
Source Temp.: 225 °C  
Electron Energy: 70 eV  
Mass Defect: -20 mu/100 u  
Solvent Delay Time: 4 min.  
Ionization Mode: EI  
Acquisition Range: 45 to 550 amu

Spectral Acquisition Rate: 100 spectra/sec

**Instrument** LECO Pegasus 4D GCxGC-TOFMS

**Notes** See application note PHAN1251 for extraction and cleanup details. A 1.5 m length of the Rtx<sup>®</sup>-200 column was trimmed from a 10 m column. Columns were connected with a Universal Press-Tight<sup>®</sup> Connector (cat.# 20429). See chromatogram GC\_FF1190 for full scale view.