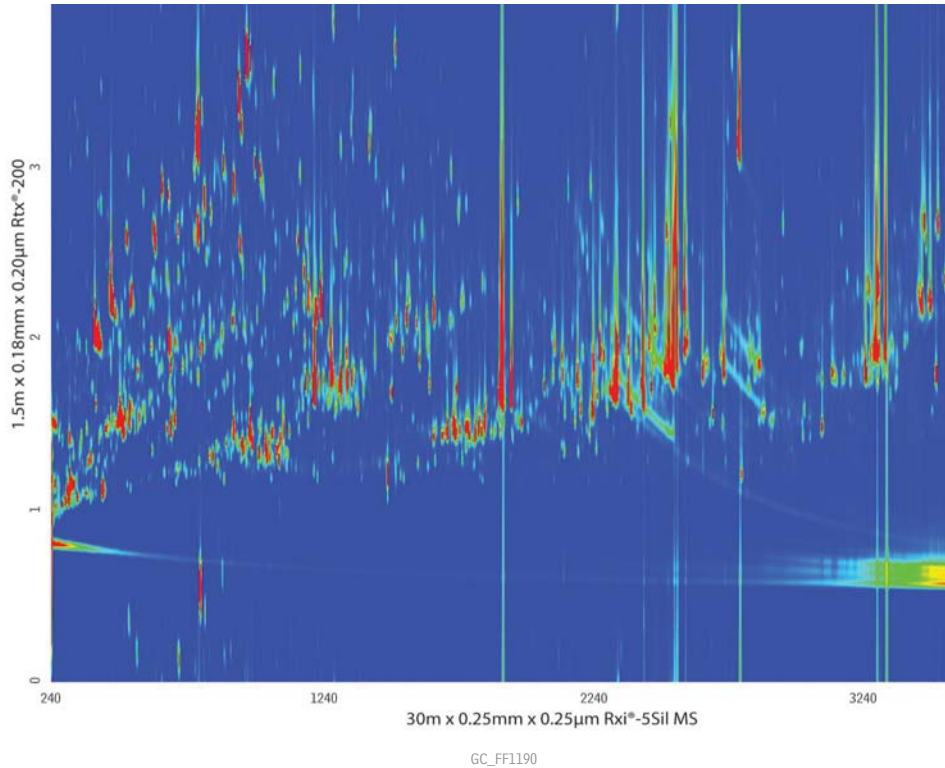


## Sage QuEChERS Extract Cleaned with Cartridge SPE (GCxGC-TOFMS Contour Plot)

*GCxGC with orthogonal Rxi®-5Sil MS and Rtx®-200 columns is a powerful way to handle complex samples like dietary supplement extracts.*



|                    |  |
|--------------------|--|
| <b>Column</b>      | Rxi®-5Sil MS 30 m, 0.25 mm ID, 0.25 µm (cat.# 13623)<br>Rtx®-200 1.5 m, 0.18 mm ID, 0.20 µm (cat.# 45001)  |
| <b>Sample</b>      | Toluene  |
| <b>Diluent:</b>    |  |
| <b>Injection</b>   |  |
| 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.   |
| <b>Oven</b>        |  |
| Oven Temp:         | Rxi®-5Sil MS: 80 °C (hold 1 min.) to 310 °C at 4 °C/min. (hold 1.5 min.)<br>Rtx®-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.  |
| <b>Modulation</b>  |  |
| Modulator          |  |
| Temp. Offset:      | 25 °C  |
| Second Dimension   |  |
| Separation Time:   | 4 sec.   |
| Hot Pulse Time:    | 1.2 sec.   |
| Cool Time          |  |
| between Stages:    | 0.8 sec.   |
| <b>Detector</b>    | 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  |
| <b>Instrument</b>  | LECO Pegasus 4D GCxGC-TOFMS  |
| <b>Notes</b>       | See application note PHAN1251 for extraction and cleanup details. A 1.5 m length of the Rtx®-200 column was trimmed from a 10 m column. Columns were connected with a Universal Press-Tight® Connector (cat.# 20429). See chromatogram GC_FF1192 for zoom. |