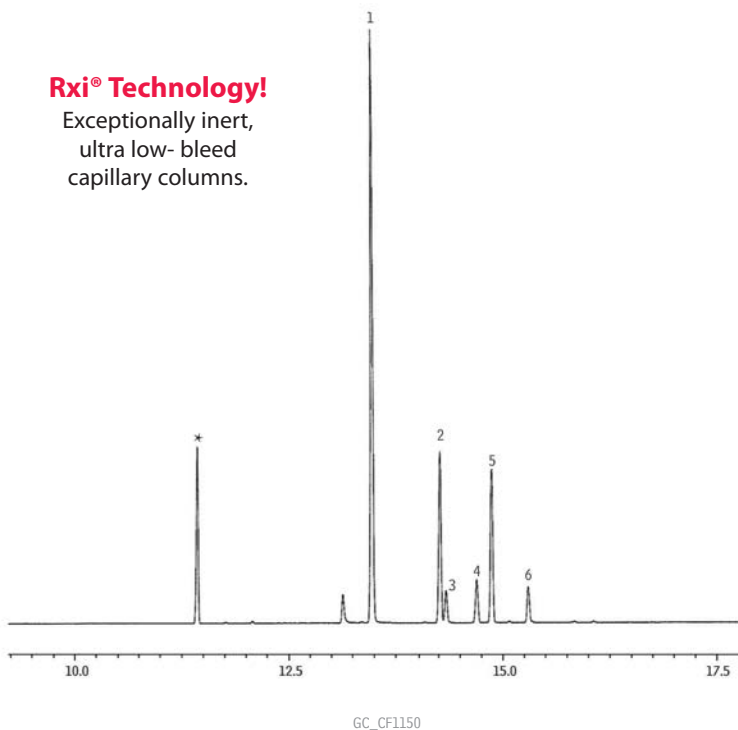




Extracted Opiates from Blood
Rxi®-5Sil MS

Rxi® Technology!

Exceptionally inert,
ultra low- bleed
capillary columns.



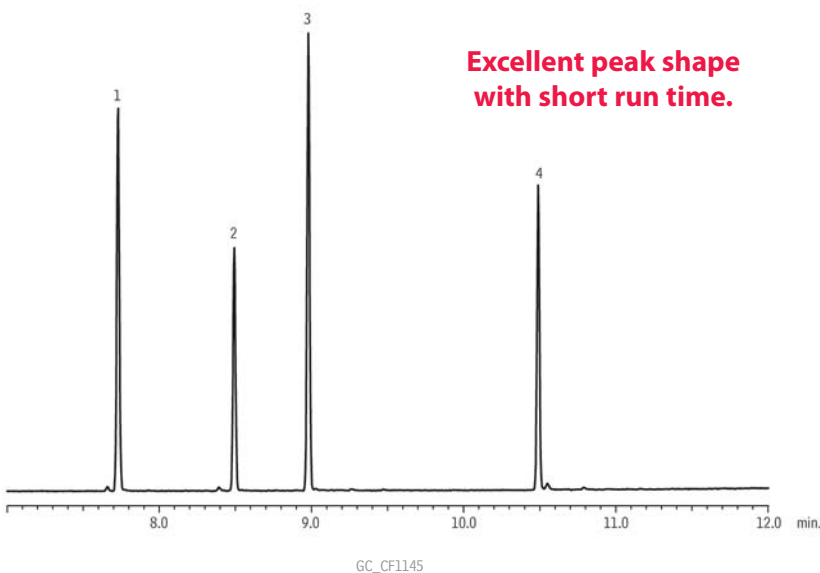
- Peaks**
1. Hydrocodone
 2. Codeine
 3. Oxycodone
 4. Hydromorphone
 5. 6-Monoacetylmorphine
 6. Morphine
 - * Matrix

Column Sample Rxi®-5Sil MS, 30 m, 0.25 mm ID, 0.25 μ m (cat.# 13623)
Diluent: Ethyl acetate
Conc.: 100 ng/mL propionic anhydride derivatives
Injection
Inj. Vol.: 1 μ L splitless (hold 1 min.)
Liner: Gooseneck Splitless (4mm) w/Wool (cat.# 22405)
Inj. Temp.: 250 °C
Purge Flow: 100 mL/min.
Oven
Oven Temp: 65 °C (hold 1 min.) to 315 °C at 15 °C/min.
Carrier Gas He, constant flow
Flow Rate: 1 mL/min.
Linear Velocity: 35 cm/sec. @ 65 °C
Detector MS
Mode: SIM
Transfer Line
Temp.: 250 °C
Analyzer Type: Quadrupole
Solvent Delay
Time: 7 min.
Tune Type: PFTBA
Ionization Mode: EI
Notes Opiates were spiked into a blood sample and extracted by SPE, then derivatized with propionic anhydride.
Acknowledgement Data courtesy of Miami Dade County Medical Examiner Department

Derivatized Cannabinoids (5 μ g/mL)
Rxi®-5Sil MS



**Excellent peak shape
with short run time.**



- Peaks**
1. Cannabidiol
 2. delta 9 THC
 3. Cannabinol
 4. THC-COOH; THCA

Column Sample Rxi®-5Sil MS, 30 m, 0.25 mm ID, 0.25 μ m (cat.# 13623)
Diluent: Ethyl acetate
Conc.: 5 μ g/mL TMS derivatives
Injection
Inj. Vol.: 1 μ L splitless (hold 1 min.)
Liner: 3.5mm Gooseneck Splitless w/Wool (cat.# 22286-200.1)
Inj. Temp.: 250 °C
Purge Flow: 21.4 mL/min.
Oven
Oven Temp: 150 °C to 330 °C at 15 °C/min. (hold 3 min.)
Carrier Gas He, constant linear velocity
Linear Velocity: 40 cm/sec., 13.8 psi, 95.1kPa @ 150 °C
Detector MS
Mode: Scan
Transfer Line
Temp.: 280 °C
Analyzer Type: Quadrupole
Source Temp.: 200 °C
Electron Energy: 70 eV
Solvent Delay
Time: 4 min.
Tune Type: PFTBA
Ionization Mode: EI
Scan Range: 200-500 amu
Scan Rate: 5 scans/sec.
Instrument Shimadzu 2010 GC & QP2010+ MS