Cocaine and Metabolites (TMS Derivatives) on Rxi®-5Sil MS (100 ng/mL)

<table>
<thead>
<tr>
<th>Peaks</th>
<th>m/z 1</th>
<th>m/z 2</th>
<th>m/z 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ecgonine methyl ester</td>
<td>82</td>
<td>96</td>
<td>256</td>
</tr>
<tr>
<td>2. Ecgonine</td>
<td>82</td>
<td>96</td>
<td>356</td>
</tr>
<tr>
<td>3. Cocaine</td>
<td>82</td>
<td>182</td>
<td>303</td>
</tr>
<tr>
<td>4. Cocaethylene</td>
<td>82</td>
<td>196</td>
<td>317</td>
</tr>
<tr>
<td>5. Benzoylecgonine</td>
<td>82</td>
<td>96</td>
<td>346</td>
</tr>
<tr>
<td>6. Cannabinol*</td>
<td>409</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

**Column**
- Rxi®-5Sil MS, 30 m, 0.25 mm ID, 0.25 µm (cat.# 13623)

**Sample**
- Diluent: Butyl chloride
- Conc.: 100 ng/mL

**Injection**
- Inj. Vol.: 1 µL splitless (hold 1 min.)
- Liner: Single Gooseneck w/Wool (cat.# 22286-200.1)
- Inj. Temp.: 250 °C
- Purge Flow: 20 mL/min.

**Oven**
- Oven Temp: 180 °C to 200 °C at 30 °C/min. to 300 °C at 15 °C/min.
- Carrier Gas: He, constant linear velocity
- Linear Velocity: 40 cm/sec., 12.5 psi, 86.2kPa @ 100 °C

**Detector**
- MS
- Mode: SIM
- Transfer Line Temp.: 310 °C
- Source Temp.: 250 °C
- Solvent Delay Time: 4 min.
- Tune Type: PFTBA
- Ionization Mode: EI

**Instrument**
- Shimadzu 2010 GC & QP2010+ MS

**Notes**
- Samples were prepared as follows:
  - Standards brought to dryness under nitrogen, then 50 µL BSTFA + 1%TMCS (cat.# 35606) added. 50 µL pyridine was then added, and samples were incubated at 70°C for 30 min. After incubation, samples were diluted with butyl chloride.
  - * Used as derivitazation check