



If Zebtron columns do not provide you with equivalent or better separations as compared to any other GC column of the same phase and comparable dimensions, return the column with comparative data within 45 days for a FULL REFUND.

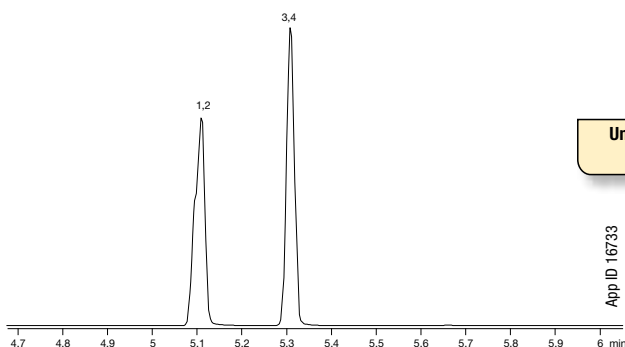
## Zebtron ZB-Drug-1 ~exclusive~

- Optimized phase for the separation of drugs of abuse
- Provides fast analysis with great peak shape
- Improves resolution of target analytes from matrix interferences
- Specially deactivated to improve quantitation for drug compounds
- Temperature Limits: 40 to 320/340 °C

### Applications

- Drugs of Abuse

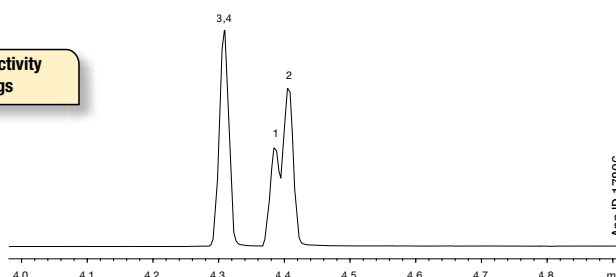
### Opiates on a ZB-5ms



Unique Selectivity for Drugs

App ID 16733

### Opiates on a ZB-Drug-1

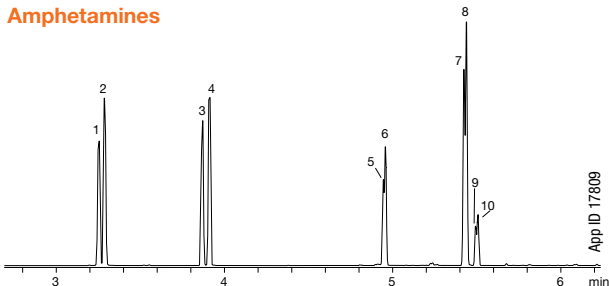


App ID 17806

**Column:** Zebtron ZB-5ms  
**Dimensions:** 10 meter x 0.18 mm x 0.18 µm  
**Part No.:** 7CD-G010-08  
**Injection:** Split 10:1 @ 240 °C, 1 µL  
**Carrier Gas:** Helium @ 1.2 mL/min (constant flow)  
**Oven Program:** 140 °C to 320 °C @ 20 °C/min for 1 min  
**Detector:** MSD @ 230 °C/min  
**Sample:** Analytes @ 10 ppm BSTFA/Pyridine  
 1. Codeine-d6  
 2. Codeine  
 3. Morphine-d3  
 4. Morphine

**Column:** Zebtron ZB-Drug-1  
**Dimensions:** 10 meter x 0.18 mm x 0.18 µm  
**Part No.:** 7CD-G023-08  
**Injection:** Split 10:1 @ 280 °C, 1 µL  
**Carrier Gas:** Helium @ 55 cm/sec (constant flow)  
**Oven Program:** 180 °C to 340 °C @ 20 °C/min  
**Detector:** MSD @ 230 °C  
**Sample:** Analytes @ 10 ppm BSTFA/Pyridine  
 1. Codeine-d6  
 2. Codeine  
 3. Morphine-d3  
 4. Morphine

### Amphetamines



App ID 17809

**Column:** Zebtron ZB-Drug-1  
**Dimensions:** 10 meter x 0.18 mm x 0.18 µm  
**Part No.:** 7CD-G023-08  
**Injection:** Split 10:1 @ 280 °C, 0.1 µL  
**Carrier Gas:** Helium @ 55 cm/sec (constant flow)  
**Oven Program:** 70 °C to 130 °C @ 20 °C/min to 270 °C @ 30 °C/min  
**Detector:** MSD @ 230 °C  
**Sample:** Analytes are 40 ppm derivatized with HFBA  
 1. Amphetamine-d11                      6. MDA  
 2. Amphetamine                            7. MDMA-d5  
 3. Methamphetamine-d14                8. MDMA  
 4. Methamphetamine                      9. MDEA-d5  
 5. MDA-d5                                    10. MDEA

### Ordering Information

#### Zebtron ZB-Drug-1 GC Columns

| ID(mm)          | df(µm) | Temp. Limits °C | Part No.    | Price |
|-----------------|--------|-----------------|-------------|-------|
| <b>10-Meter</b> |        |                 |             |       |
| 0.18            | 0.18   | 40 to 320/340   | 7CD-G023-08 |       |
| <b>15-Meter</b> |        |                 |             |       |
| 0.25            | 0.25   | 40 to 320/340   | 7EG-G023-11 |       |
| <b>30-Meter</b> |        |                 |             |       |
| 0.25            | 0.25   | 40 to 320/340   | 7HG-G023-11 |       |

Note: If you need a 5 in. cage, simply add a (-B) after the part number, e.g., 7HG-G023-11-B. Some exceptions may apply. Agilent 6850 and some SRI and process GC systems use only 5 in. cages. See p. 91.



**ZB-Drug-1 Test Mix**      **Part No.: AGO-8431**  
 Price:



Contact Phenomenex or your local Phenomenex distributor for additional GC products and applications.



**Extend column lifetime. Add a Z-guard to your next Zebtron GC order.**