



## DULOXETINE IN BLOOD AND URINE BY LC-MS/MS\*

Part #

**ZSDAU020** – CLEAN SCREEN® DAU 200 mg, 10 mL Tube

### 1. PREPARE SAMPLE:

To 1 mL of 100 mM phosphate buffer (pH 6.0) add internal standard.\*

Add 1 mL of blood or urine. Add 2 mL of 100 phosphate buffer (pH 6.0). Mix/vortex. Sample pH should be  $6.0 \pm 0.5$ .

Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate. Mix/vortex.

Centrifuge as appropriate.

### 2. CONDITION CLEAN SCREEN® EXTRACTION COLUMN:

1 x 3 mL CH<sub>3</sub>OH.

1 x 3 mL D.I. H<sub>2</sub>O.

1 x 1 mL 100 mM phosphate buffer (pH 6.0).

**NOTE:** aspirate at < 3 inches Hg to prevent sorbent drying out.

### 3. APPLY SAMPLE:

Load sample at 1-2 mL / minute.

### 4. WASH COLUMN:

1 x 3 mL D.I. H<sub>2</sub>O.

1 x 3 mL 100 mM acetic acid.

1 x 3 mL CH<sub>3</sub>OH.

Dry column (5 minutes at > 10 inches Hg).

### 5. ELUTE DULOXETINE:

1 x 3 mL CH<sub>2</sub>Cl<sub>2</sub>/ IPA/ NH<sub>4</sub>OH (78:20: 2 v/v). Collect eluate at 1-2 mL /minute.

### 6. EVAPORATION:

Evaporate eluate under a gentle stream of nitrogen < 40 °C.

### 7. RECONSTITUTE sample in 200 µL of 0.1% Formic Acid.

Inject 5 µL.

# INSTRUMENT CONDITIONS:

**Column:** 50 x 2.1 mm (5 µm) C<sub>18</sub>

**Mobile phase:**

Time/ min	% Acetonitrile	% 0.1 % Formic Acid
0	5	95
4	90	10
4.1	5	95
5	5	95

**Flowrate:** 0.5 mL/minute. **Column**

**Temperature:** ambient. **Detector:** API

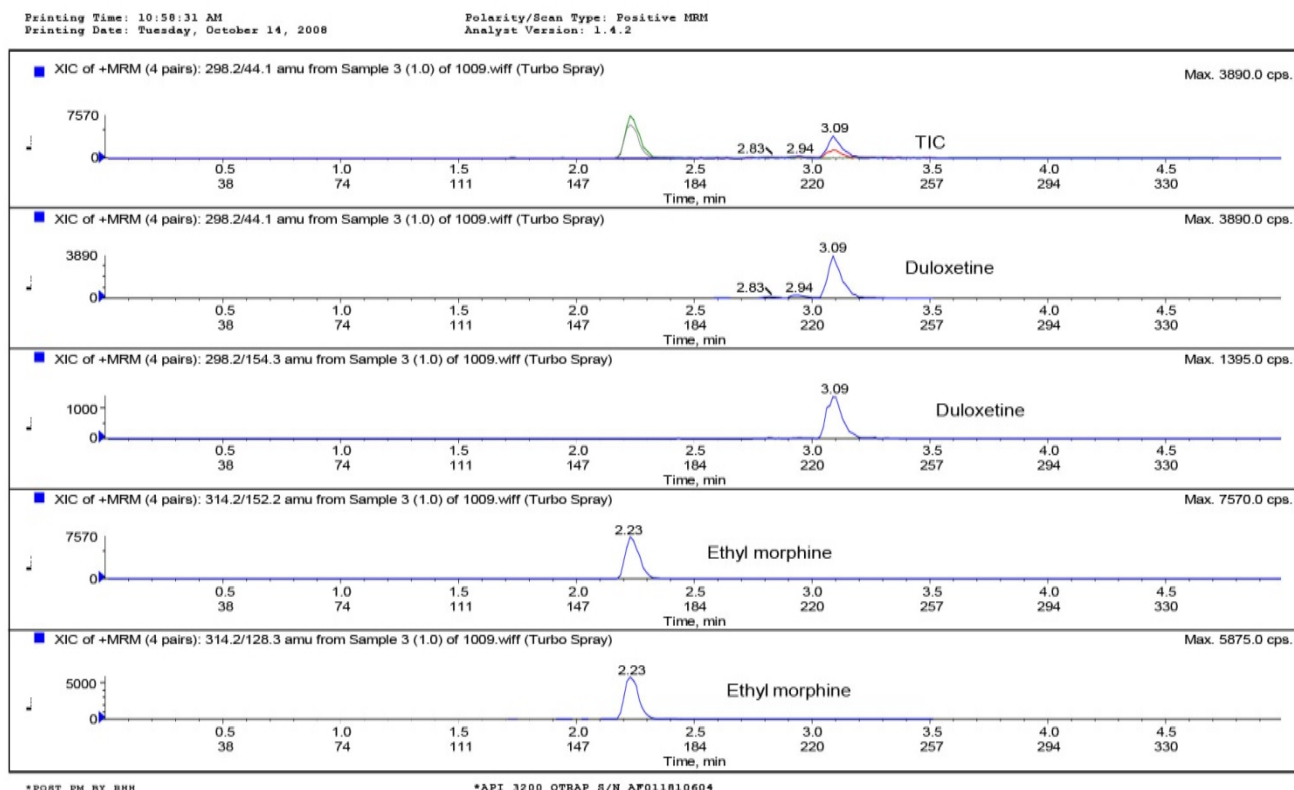
3200 Q-Trap MS/MS.

## Compound

## MRM Transition

* Ethyl Morphine (Internal Standard)	314.2/ 152.2
Duloxetine	298.1/44.1

Chromatogram of Ethyl Morphine and Duloxetine



\*Presented at SOFT annual meeting 2008 by A.A. Elian