ANTIDEPRESSANTS / PAINKILLERS IN BLOOD AND URINE USING: 200 mg CLEAN SCREEN® EXTRACTION COLUMN

PART #: ZSDAU020

LC-MSMS

1. **PREPARE SAMPLE**
   To 1 mL of 100 mM prosphate buffer (pH= 6) add internal standard.*
   Add 1 mL of blood or urine. Add 2 mL of 100 phosphate buffer (pH= 6). Mix/vortex.
   Sample pH should be 6.0 ± 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 MeOH.
   1 x 3 mL H_2O.
   1 x 1 mL 100 mM phosphate buffer (pH= 6).
   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 DI Water.
   1 x 3 mL 1% acetic acid.
   1 x 3 mL Methanol.
   Dry column (5 minutes at > 10 inches Hg).

5. **ELUTE ANTIDEPRESSANTS/PAINKILLERS:**
   1 x 3 mL ethyl acetate; acetonitrile: ammonia (78: 20: 2 v/v).
   Collect eluate at 1-2 mL /minute.

6. **EVAPORATION:**
   Evaporate eluate under a gentle stream of nitrogen < 40ºC.

7. **RECONSTITUTE sample in 100 µL of methanol.**
   Inject 5 µL.

INSTRUMENT CONDITIONS:

Column: 150 x 2.1 mm (3.5 µm) Zorbax: Agilent Technologies.
Mobile phase: Acetonitrile: 0.1% Formic acid (33:67).
Flowrate: 0.35 mL/minite.
Column Temperature: ambient.
Detector: API 2000 MS/MS.

Compound	MRM Transistion	Cerilliant #
Amitriptyline	278.8/91.1	A-923
*Amitriptyline-D3	281.2/91.2	B-130284 N-10
Diphenhydramine	256.2/167.1	D-015
*Diphenhydramine-D3	259.2/167.1	D-017
Doxepin	280.2/107.1	D-005
EDDP	278.2/234.2	E-022
*EDDP-D3	281.4/234.3	E-021
Methadone	310.2/105.1	M-007
*Methadone-D9	319.2/268.3	M-088
Nortriptyline	264.2/91.1	N-907
Norpropoxyphene	326.2/44.1	N-913
*Norpropoxyphene-D5	331.1/267.1	N-904
Propoxyphene	340.2/58.1	P-011
*Propoxyphene-D11	351.3/64.0	P-013
Sertraline	308.1/161.0	S-006
Tramadol	264.2/58.1	T-027
*Tramadol-D3	268.2/58.0	T-029
Venlafaxine	278.2/58.2	V-004
Zolpidem	308.2/235	Z-901