



**PROPOXYPHENE AND NORPROPOXYPHENE IN BLOOD,  
PLASMA/SERUM, TISSUE AND URINE USING: 200 mg  
CLEAN SCREEN<sup>®</sup> EXTRACTION COLUMN**

Part #: ZSDAU020

LC-MSMS

**1. PREPARE SAMPLE:**

To 1 mL of 100 mM phosphate buffer (pH= 6) add internal standard.\*

Add 1 mL of whole blood, serum/ plasma, urine or tissue (1 g of 1:4 homogenate).

Add 2 mL of 100 mM phosphate buffer (pH= 6).

Vortex and centrifuge as appropriate.

**2. CONDITION 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).

**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 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 PROPOXYPHENE/ NORPROPOXYPHENE:**

1 x 3 mL ethyl acetate; acetonitrile: ammonia (78: 20: 2 v/v)

Or

1 x 3 mL CH<sub>2</sub>Cl<sub>2</sub>/ IPA/ ammonia (78:20:2 v/v)

Collect eluate at 1-2 mL /minute.

**6. EVAPORATION:**

Evaporate eluates under a gentle stream of nitrogen < 40°C to half volume.

Add 100 µL of 0.1% HCl in CH<sub>3</sub>OH.

Vortex mix.

Continue evaporation to dryness <40 °C.

**7. Reconstitute** sample in 100 µL of CH<sub>3</sub>OH.

Inject 5 µL.

## INSTRUMENT CONDITIONS:

**Column:** 50 x 2.1 mm (3 µm) Selectra® Phenyl (UCT, LLC)

**Mobile phase:**

<u>Time</u>	<u>% Acetonitrile</u>	<u>%0.1% Formic acid</u>
0	30	70
10	30	70

**Flowrate:** 0.35 mL/ minute

**Column Temperature:** ambient

**Detector:** API 2000 MS/MS

<u>Compound</u>	<u>MRM Transition</u>	<u>Cerilliant #</u>
Propoxyphene	340.0/ 58.0	P-011
*Propoxyphene-D11	351.2/ 64.0	P-013
Norpropoxyphene	326.0/ 252.0	N-013
*Norpropoxyphene-D5	331.0/257.0	N-904

## Chromatogram of:

Propoxyphene (top)  
Propoxyphene-D11  
Norpropoxyphene  
Norpropoxyphene-D5 (lower)

