

APPENDIX C: SUGGESTED METHODS OF OTHER MATRICES

SOLID-PHASE EXTRACTION METHOD FOR OASIS® MCX (TISSUE HOMOGENATE)
PROCEDURE FOR EXTRACTING BASIC DRUGS FROM TISSUE HOMOGENATE USING 6 cc/150 mg LP
OASIS® MCX CARTRIDGES.

1. PREPARE SAMPLE

- Prepare Tissue homogenate (5.0 g) by diluting with (50-60 mL) 0.1M KH_2PO_4 (or other buffer), vortex and centrifuge @ 3K RPM.
 - Collect supernatant (Filter*) and transfer to conditioned Oasis® MCX Cartridge with 60 mL reservoir attached
- * Filter if necessary, 0.45 micron filter

2. CONDITION OASIS® CARTRIDGE

- 2 mL MeOH

3. EQUILIBRATE

- 2 mL Phosphate Buffer

4. LOAD

- Supernatant at 4-5mL/min.

5. WASH 1

- 4 mL H_2O (Try 2 x 2 mL)

6. WASH 2

- 4 mL 0.1N HCl
(Removes proteins and non-retained aqueous materials Protonates Bases)

7. WASH 3

- 4 mL - 5% MeOH in H_2O

8. WASH 4

- 4 mL 70:30 ACN/MeOH
(Removes acidic and neutral drugs)

9. ELUTE

- 2 mL 5% NH_4OH in 70:30 ACN/MeOH
(Elutes the basic drug(s))

10. EVAPORATE

- @ 40° C and reconstitute in appropriate solvent

NOTE: No stopcock needed, turn vacuum
on add MeOH then add buffer!

Oasis® MCX Extraction Cartridge 6 cc 150 mg LP
Reservoir 60 cc for Oasis® cartridges
Reservoir Adapter for 1, 3, 6 cc cartridges

30/box
12/box
12/box

186000255
WAT024659
WAT054260

Notes: The Oasis® MCX sorbent is a Mixed-mode polymeric sorbent with Cation-exchange and reversed-phase functional groups. The strong Sulfonic acid cation exchange groups impart high selectivity for basic drugs, producing very clean extracts from urine, whole blood, serum or plasma for GC, GC/MS, LC/MS or HPLC