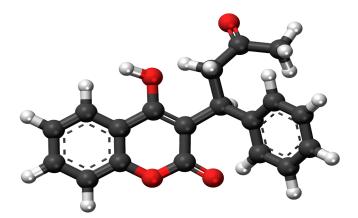
# Warfarin In Whole Blood: Manual Method For GC-MS OR LC Confirmations Using: 200mg Clean-Up<sup>®</sup> C-30 Extraction Column



## **UCT Part Numbers**

**CEC30123** 200 mg CLEAN-UP® C-30 Extraction Column

# **Procedure:**

#### 1. Prepare Sample

- a) To 9 mL of 100 mM phosphate buffer (pH= 6.0) add internal standard. Add 1mL of whole blood and Mix/vortex.
- b) Sample pH should be 6.0 + 0.5.
- c) Adjust pH accordingly with 0.1 M monobasic or dibasic sodium phosphate.
- d) Centrifuge as appropriate.

### 2. Condition Extraction Column

- a) 1 x 3 mL CH₃OH
- b)  $1 x 3 mL DI H_2O$
- c) 1 x 3 mL 100 mM phosphate buffer, (pH=6.0) aspirate.
- Note: Aspirate at < 3 inches. Hg to prevent sorbent drying out.

#### 3. Apply Sample

a) Load sample at 1-2 mL / minute.

#### 4. Wash Column

- a) Add 1 x 3 mL of phosphate buffer (0.1 M pH 6).
- b) Dry under full vacuum for 10 mins.
- c) Add 1 x 3 mL of Hexane.
- d) Dry under full vacuum for 10 mins

#### 5. Elute Warfarin

a) Add 2 x 3 mL of methanol/ ethyl acetate (12:88). Note: Prepare elution solvent daily.





## 6. Collect eluates at approx 1-2 mL/minute

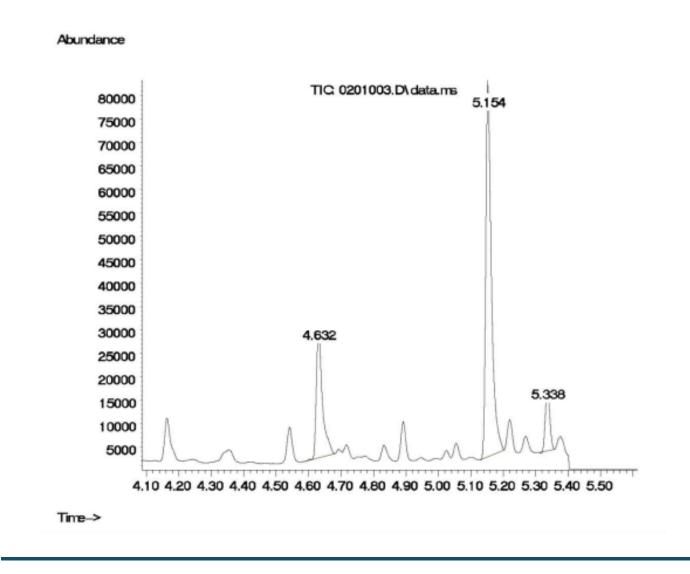
#### 7. Dry Samples

- a) Evaporate to dryness at < 40°C.
- b) Add 50 µL of ethyl acetate.
- c) Add 50 µL of TMAH, and vortex.
- d) React at for 1 hour at 70 °C.
- e) Cool and inject 1-2 µL onto GC-MS
- f) Monitor the following ions:

Compound	Primary	Secondary	Tertiary	Cerilliant #
Warfarin	279	322	280	W-003
*p-chlorowarfarin	313	315	356	

# Warfarin Chromatogram

GC-MS (methylation)



UCT, LLC • 2731 Bartram Road • Bristol, PA 19007 800.385.3153 • 215.781.9255 <u>www.unitedchem.com</u> Email: <u>methods@unitedchem.com</u> ©UCT, LLC 2008 • All rights reserved





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