



## Hydrochlorothiazide in Plasma — PPT Method

**EAB10002**

Bonna-Agela Technologies

### Experimental Details

#### Sample Preparation

- (1) Put Cleanert<sup>®</sup> PPT and 96-well plate onto the SPE manifold
- (2) Add 50  $\mu$ L of 20 ng/mL hydrochlorothiazide into each well
- (3) Quickly add 250  $\mu$ L ACN and stand for 3 min
- (4) Suction by vacuum and dry with N<sub>2</sub>, then resolve with 200  $\mu$ L mobile phase.

#### Instrumentation

Instrumentation: LC-MS/MS, API 4000

Column: Venusil<sup>®</sup> ASB C18, 2.1 $\times$ 150 mm, 5  $\mu$ m;

Column temperature: 25 $^{\circ}$ C

Mobile phase: 90% ACN, 10% 0.01 mol/L ammonium acetate aq (0.1% formic contained)

Flow rate: 0.2 mL/min;

Sample injection: 5  $\mu$ L;

Ion source: ESI - Negative

Scan mode: MRM

| Compound            | Parent ion | Daughter ion |
|---------------------|------------|--------------|
| Hydrochlorothiazide | 295.7      | 269.0        |

**Table 1 MS/MS transitions information of Hydrochlorothiazide**

### Results



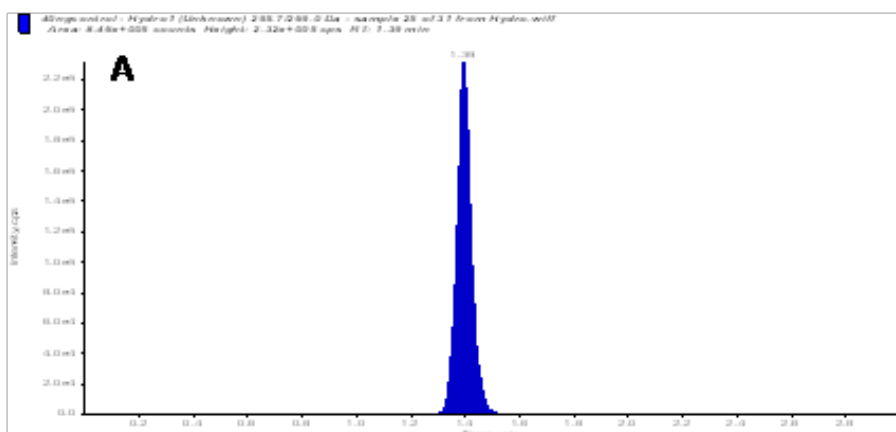


Figure 2 Chromatogram of Hydrochlorothiazide standard solution

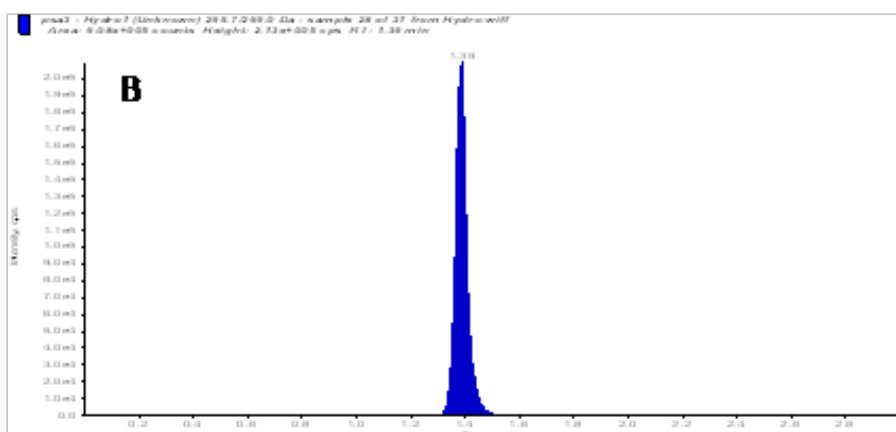


Figure 3 Chromatogram of plasma sample spiked with Hydrochlorothiazide

| Concentration<br>(ng/mL) | Recovery (%) |      |      |      |      |      | Average<br>recovery<br>(%) | RSD<br>(%) |
|--------------------------|--------------|------|------|------|------|------|----------------------------|------------|
|                          | 1            | 2    | 3    | 4    | 5    | 6    |                            |            |
| 20                       | 79.4         | 75.8 | 76.5 | 74.9 | 75.1 | 78.4 | 76.7                       | 2.39       |

Table 2 Recovery data of spiked sample

## Ordering Information

| Products                 | Specification           | Cat.No     |
|--------------------------|-------------------------|------------|
| Cleanert® PPT            | 2 mL/well               | 96CD2025-Q |
| Venusil® ASB C18         | 2.1×150 mm, 5 μm, 150 Å | VS951502-0 |
| 96-well collection plate | 2.2 mL Squared well     | 96SP2036-2 |





|                           |  |          |
|---------------------------|--|----------|
| 96-well vacuum manifold   | adapt to 96 well plate   | VM96     |
| NV-96G for 96 Well Plates | adapt to 96 well plate   | NV96-G   |
| Acetonitrile              | HPLC, 4 L  | AH015-4  |
| 1.5 mL vials              | 1.5 mL short thread vial, amber glass, label and filling lines   | AV1111-0 |
| 1.5 mL vials caps         | 9 mm screw neck cap, center hole; red silicone/ white PTFE septa | AV2100-0 |
| Micro-insert clear glass  | 300 $\mu$ L micro-insert, 31 $\times$ 6 mm                       | AV1132-6 |

Link : <http://t.coralcodes.com:829/application/detail/224>

