## [APPLICATION NOTE]

# Waters

#### ANALYSIS OF HERBAL MEDICINE ON AN ACQUITY UPLC BEH AMIDE COLUMN

#### CLICK ON PART NUMBERS FOR MORE INFORMATION UPLC CONDITIONS

Column:	ACQUITY UPLC <sup>®</sup> BEH Amide,
	1.7 μm, 2.1 x 100 mm
Part Number:	<u>186004801</u>
Mobile Phase:	80:20 MeCN:H <sub>2</sub> 0
Isocratic Flow Rate:	0.6 mL/min
Column Temp.:	60 ℃
Sample Temp.:	10 °C
Injection Vol.:	1.7 μL; PLNO on 10 μL loop
Strong & Weak	
Needle Wash:	95:5 MeCN:H <sub>2</sub> 0
Seal Wash:	10:90 MeOH:H <sub>2</sub> 0
UV:	203 nm
Sampling Rate:	20 Hz
Filter Time Constant:	0.2 sec
Total Run Time:	2.5 min
Instrument:	ACQUITY UPLC with ACQUITY UPLC PDA

#### PRETREATMENT

- 1. Weigh 2 g of herbal medicine powder into a centrifuge tube.
- 2. Add 30 mL of 60% MeOH/40%  $\rm H_{2}O.$
- 3. Shake for 15 min.
- 4. Centrifuge at 4,000 rpm for 10 min.
- 5. Obtain the supernatant.
- 6. Repeat steps 2-5 with the residue using 15 mL of 60% MeOH/40%  $\rm H_2O.$
- 7. Combine the supernatant, and make exactly 50 mL by adding 60% MeOH/40%  $\rm H_2O.$
- Take 10 mL of this solution and add 3 mL of NaOH test solution (1 mol/L).
- 9. Let stand for 30 min.
- 10.Add 3 mL of HCl test solution (1 mol/L).
- 11.Add 60% MeOH/40%  $\rm H_2O$  to make exactly 20 mL.

#### SOLID-PHASE EXTRACTION

SPE Device:	Sep-Pak® Plus $C_{_{18}}$ cartridge 360 mg (55-105 $\mu m)$
Part Number:	WAT020515

- 1. Condition with 2 mL MeOH.
- 2. Equilibrate with 2 mL of 30% MeOH/70%  $\rm H_{2}O$  just before loading.
- 3. Load 5 mL of the solution from step 11 in the pretreatment stage.
- 4. Wash with 2 mL of 30% MeOH/70%  $H_2O$ .
- 5. Wash with 1 mL of Na<sub>2</sub>CO test solution (1 mol/L).
- 6. Wash with 10 mL of 30% MeOH/70%  $H_2O$ .
- 7. Elute with 5 mL MeOH (this is the injection solution).

### COMPOUND

