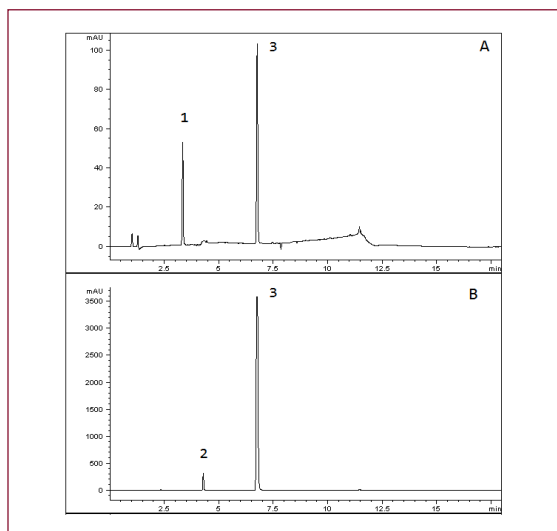
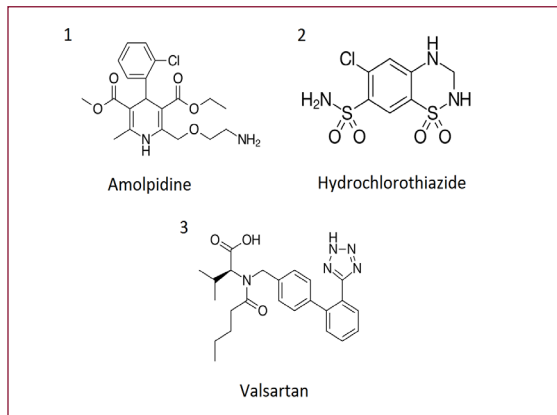


# Amlodipine, Valsartan, and Hydrochlorothiazide Tablet Assay

## Everyday reliable precision on the Cogent RP C18



**Notes:** Amlodipine, valsartan, and hydrochlorothiazide is a combination of medicines that is used to treat high blood pressure (hypertension). Amlodipine is a calcium channel blocker (CCB) that regulates the absorption of calcium into the cells of the heart and blood vessels. This causes the blood vessels to relax and increases the supply of blood and oxygen to the heart while reducing its workload. Valsartan is an angiotensin II receptor blocker (ARB) and works by blocking a substance in the body that causes the blood vessels to tighten. This lowers blood pressure and increases the supply of blood and oxygen to the heart. Hydrochlorothiazide is a thiazide diuretic (water pill). It reduces the amount of water in the body.

### Method Conditions

**Column:** Cogent Cogent RP C18™, 3µm, 100Å

**Catalog No.:** 68318-15P

**Dimensions:** 4.6 x 150 mm

**Solvents:** A: Acetonitrile:water:phosphoric acid (50:950:1)

B: Acetonitrile:water:phosphoric acid (950:50:1)

Gradient:	time (min.)	%B
	0	5
	3	50
	6	60
	10	95
	10.1	5
	15	5

**Injection vol.:** 10µL

**Flow rate:** 1.5 mL/min

**Detection:** 225 nm

**Diluent:** Acetonitrile:water (500:500)

**Sample:** A: Valsartan/Hydrochlorothiazide standards (0.16/0.025mg per mL)

B: Valsartan/Amlodipine Sample (3.2/0.1mg per mL)

**Peaks:** 1. Hydrochlorothiazide

2. Amlodipine

3. Valsartan

### Discussion

This method demonstrates the USP HPLC Assay for Amlodipine, Valsartan, and Hydrochlorothiazide Tablets in the Cogent RP C18. As shown in the chromatograms, the peak efficiency is superb and USP peak tailing guidelines are easily met with the Cogent RP C18 3µm column. This demonstrates a great alternative column for easy plug and play methods. The Cogent C18 is end-capped and has excellent reproducibility and robustness.

USP Method Page Information:

USP43-NF38 - 279

USP42-NF37 - 274

USP41-NF36 1S - 8278

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