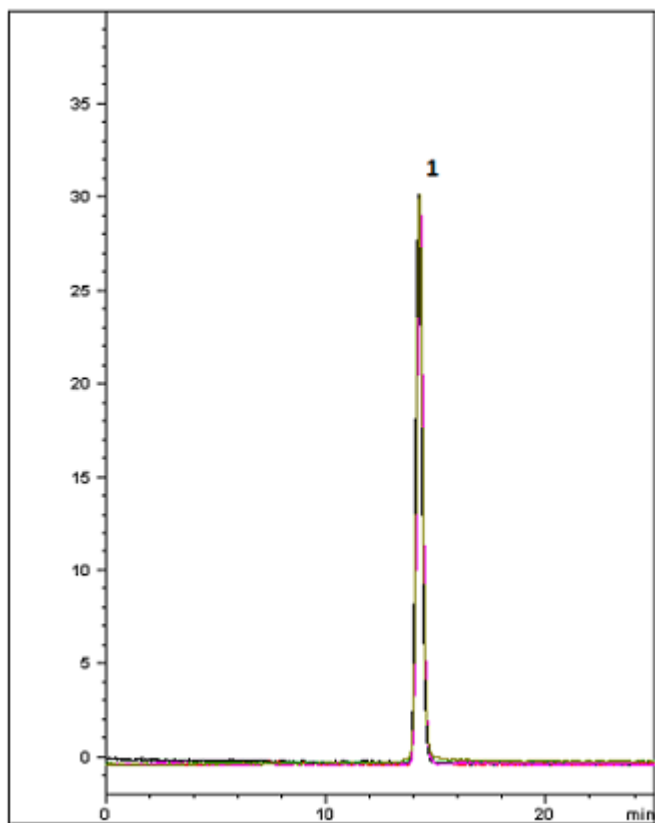




## Felodipine Extended-Release Tablets USP Assay - AppNote

### USP Method for Felodipine ER Tablets

This method presents the USP Felodipine Extended-Release Tablet assay using the Cogent RP C18. As shown in the chromatogram with a five injection overlay, the peak efficiency is superb and USP peak tailing guidelines are easily met with the Cogent RP C18™ column. This demonstrates a great alternative Column for easy plug and play or alternate for this USP Method.



 **Peak:**  
Felodipine

**Method Conditions:**

**Column:** Cogent RP C18™, 5µm, 100Å

**Catalog No.:** 68518-15P

**Dimensions:** 4.6 x 150 mm

**Buffer:** 6.9 mg/mL of Monobasic Sodium Phosphate in Water. *Adjust with 1 M Phosphoric Acid to a pH of 3.0 ± 0.05*

**Mobile Phase:** Acetonitrile, Methanol, and Buffer (40:20:40)

**Injection vol.:** 40µL

**Flow rate:** 1.0 mL/minute

**Detection:** UV @ 362 nm

**Sample:** Standard solution: 0.02 mg/mL of USP Felodipine in Mobile phase

Most recently appeared in Pharmacopeial Forum: Volume No. 43(6) Page Information:

*USP43-NF38 - 1827*

*USP42-NF37 - 1787*

*USP41-NF36 - 1690*

**Note:** *Felodipine is a calcium channel blocker and acts primarily on vascular smooth muscle cells by stabilizing voltage-gated L-type calcium channels in their inactive conformation. Felodipine prevents myocyte contraction by binding to calcium-binding proteins, which exhibits competitive antagonism of the mineralcorticoid receptor. This event results into inhibiting the activity of calmodulin-dependent cyclic nucleotide phosphodiesterase and blocking calcium influx through voltage-gated T-type calcium channels. This reduces movement of calcium into the cells of the heart and blood vessels and increases supply of blood and*



*oxygen to the heart.*



**Attachment:**

**No. 387 Felodipine Extended Release USP Method pdf** 84.7 Kb [Download File](#)