

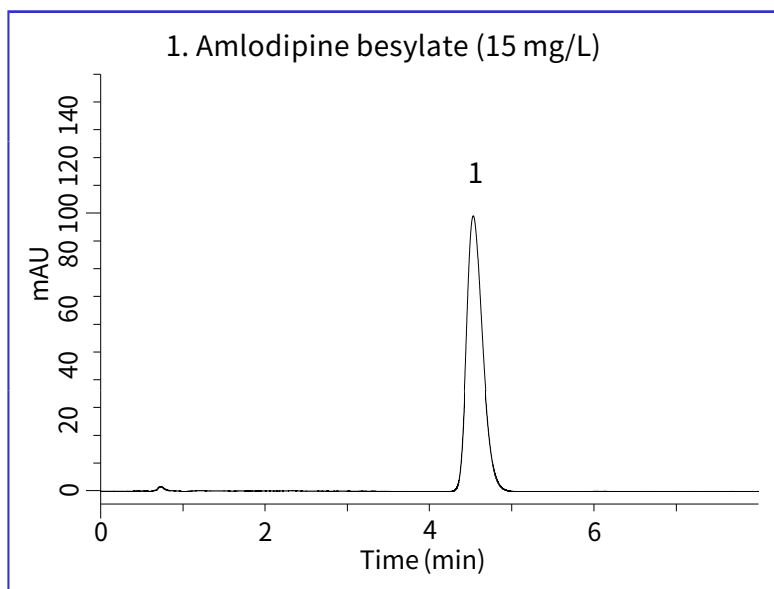
Amlodipine is an antihypertensive and a member of dihydropyridine class of calcium channel blockers. It relaxes the smooth muscle in the arterial wall by inhibiting calcium influx across cell membrane.

Consequently, peripheral resistance is decreased, and blood pressure is reduced.

In this note, chromatograms of amlodipine based on the condition described in the United States Pharmacopeia (USP) are shown. Using

Inertsil ODS-4, sharp peak was obtained from tablet samples as well as standard solution.

## A chromatogram obtained from standard solution

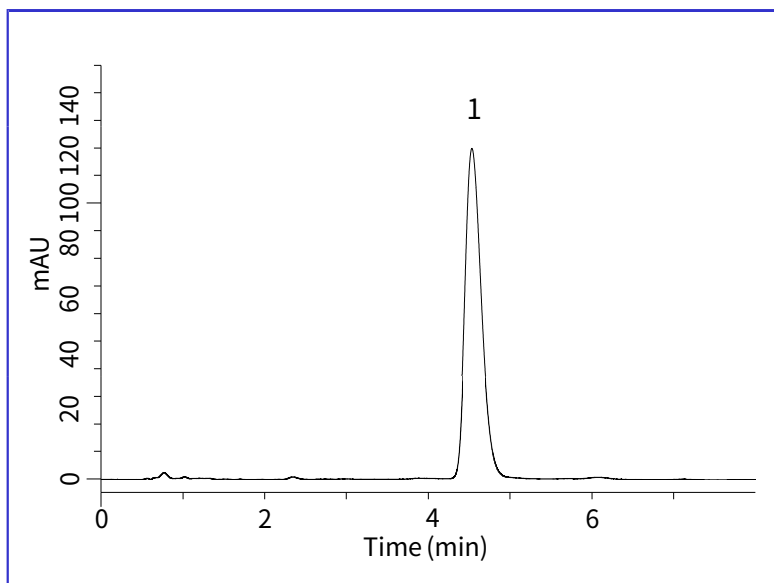


### HPLC Conditions

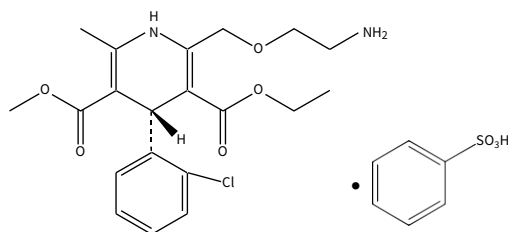
<b>Column</b>	: Inertsil ODS-4 HP (3 $\mu$ m, 50 x 4.6 mm I.D.)
<b>Column Cat. No.</b>	: 5020-14068
<b>Eluent</b>	: A) CH <sub>3</sub> OH B) CH <sub>3</sub> CN C) 0.7 % Triethylamine in H <sub>2</sub> O (pH 3, H <sub>3</sub> PO <sub>4</sub> ) A/B/C = 7/3/10, v/v/v
<b>Flow rate</b>	: 1.0mL/min
<b>Col. Temp.</b>	: 25 °C
<b>Detection</b>	: UV 237 nm
<b>Inj. Volume</b>	: 70 $\mu$ L

## A chromatogram obtained from tablet sample

The sample concentration was adjusted to 20 mg/L as amlodipine besylate.

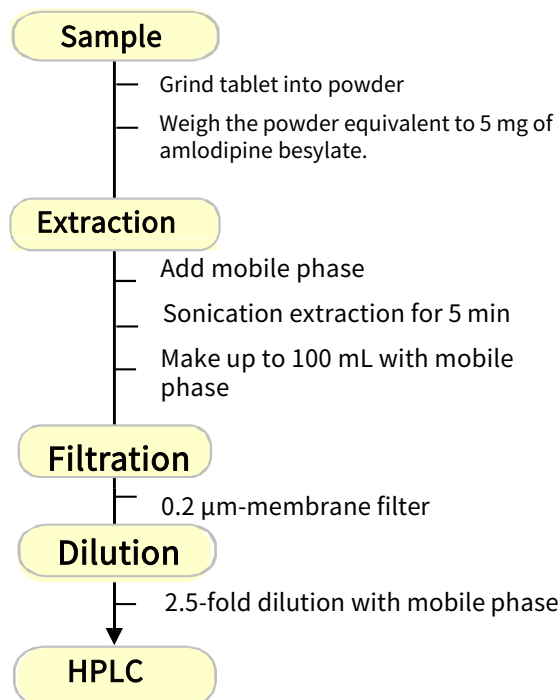


## Chemical Structure



Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

## A Sample Pretreatment Method for Tablet Sample



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