Ephedra Herb *(Herba Ephedrae)* – 麻黄

Sample source

Commercially available Ephedra

Chemical reference substances

Ephedrine hydrochloride (National Institute for the Control of Pharmaceutical and Biological Products)

Preparation of test solution

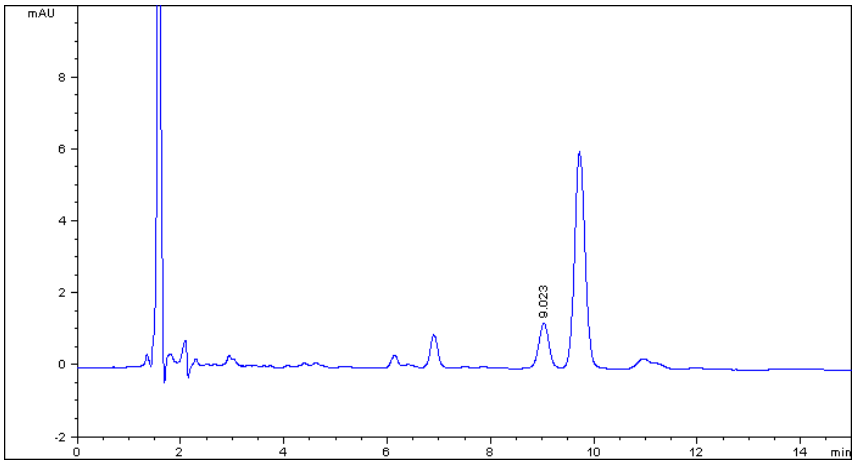
Accurately weigh 0.2 g of the fine powder in a stoppered conical flask, accurately add 25 mL of methanol, weigh, treat ultrasonically for 45 minutes, allow to cool, weigh again and replenish the lost weight with methanol, shake well and filter. Accurately apply 1 mL of the successive filtrate to a small column (1 cm in inner diameter) packed with neutral aluminium oxide (100-200 mesh, 1.5 g), elute with 50 % methanol. Collect about 9 mL of the eluent in a 10 mL volumetric flask, add 1 drop of phosphoric acid, dilute with 50 % methanol to volume, and mix well. Filter through a millipore membrane (0.45 µm), use the filtrate as the test solution.

Chromatographic conditions

- Column: ZORBAX SB C18 4.6×150 mm, 5 µm (883975-902)
- Column temperature: 25 °C
- Mobile phase: acetonitrile-0.1% phosphoric acid (6:94)
- Detector wavelength: 207 nm
- Flow rate: 1.0 mL/min
- Injection volume: 5 µL

Chromatographic system

- Agilent 1200 Series quaternary pump with vacuum degasser
- Agilent 1200 Series high-performance autosampler
- Agilent 1200 Series thermostatted column compartment
- Agilent 1200 Series variable wavelength detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU*s)	n	USP T_f
Ephedrine	5.015	9.023	1.26	17.4	10356	1.0