

# Chinese Mahonia Stem (*Caulis Mahoniae*) – 功劳木

## Sample source

Commercially available Chinese Mahonia Stem

## Chemical reference substances

Berberine hydrochloride (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 110713-200208)

## Preparation of test solution

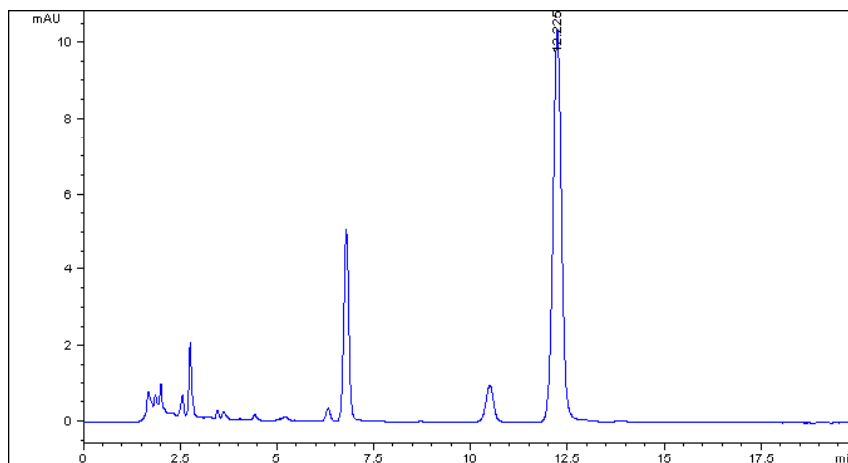
Accurately weigh 0.25 g of the coarse powder, accurately add 50 mL of a mixture of hydrochloric acid and methanol (1:100), weigh, allow to soak at room temperature for 30 minutes, treat ultrasonically for 45 minutes, allow to cool, weigh again, replenish the lost weight with a mixture of hydrochloric acid and methanol (1:100), mix well and filter. Accurately measure 5 mL of the filtrate in a flask and evaporate to dryness, dissolve the residue in a mixture of acetonitrile and water (3:7), transfer to a 5 mL volumetric flask, dilute to volume, mix well, filter, and use the filtrate as the test solution.

## Chromatographic conditions

- Column: ZORBAX Eclipse Plus C18, 4.6×250 mm, 5 µm, P/N 959990-902
- Column temperature: 50 °C
- Mobile phase: acetonitrile-0.05mol/L potassium dihydrogen phosphate (pH 3.15) (25:75)
- Detector wavelength: 265 nm
- Flow rate: 1.0 mL/min

## Chromatographic system

- Agilent 1200 Series quaternary pump with vacuum degasser
- Agilent 1200 Series high-performance autosampler
- Agilent 1200 Series thermostated 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 <sub>r</sub>
Berberine	5.148	15.37	91.8	1609.2	17258	1.28