

Giant Knotweed (*Rhizoma et Radix Polygoni Cuspidati*) – 虎杖

Sample source

Commercially available Giant Knotweed Rhizome

Chemical reference substances

Emodin (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 110756-200210)

Preparation of test solution

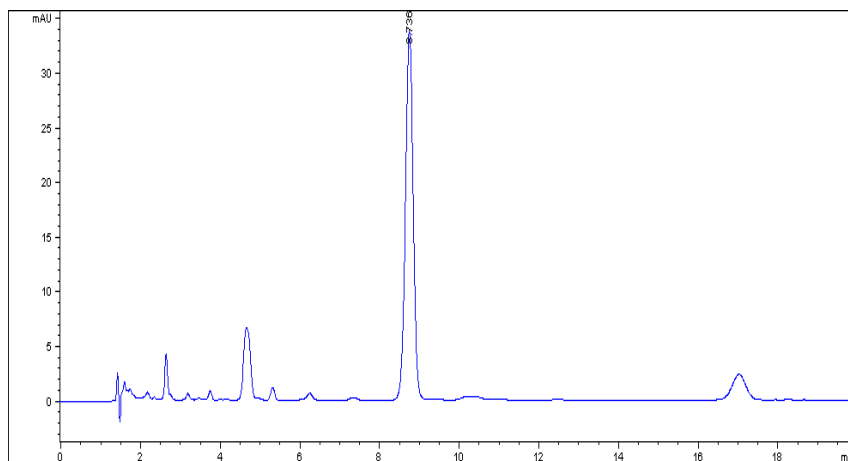
Accurately weigh 0.1 g of the powder in a stoppered conical flask, accurately add 25 mL of chloroform and 20 mL of sulfuric acid (2.5 mol/L), and weigh. Heat under reflux on a water bath at 80 °C for 2 hours, allow to cool and weigh again, replenish the lost solvent with chloroform and mix well. Separate the chloroform layer and evaporate accurately 10 mL to dryness. Dissolve the residue in methanol, transfer to a 10 ml volumetric flask, dilute to volume with methanol, mix well, filter and 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: methanol-0.1 % phosphoric acid (75:25)
- Detector wavelength: 254 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 thermostated column compartment
- Agilent 1200 Series diode-array detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU*s)	n	USP T _r
Emodin	4.824	8.736	32.61	469.8	9290	0.99