

Common Anemarrhena Rhizome (*Rhizoma Anemarrhenae*) – 知母

Sample source

Commercially available Common Anemarrhena Rhizome

Chemical reference substances

Sarsasapogenin (National Institute for the Control of Pharmaceutical and Biological Products, Batch number: 744-8701)

Preparation of test solution

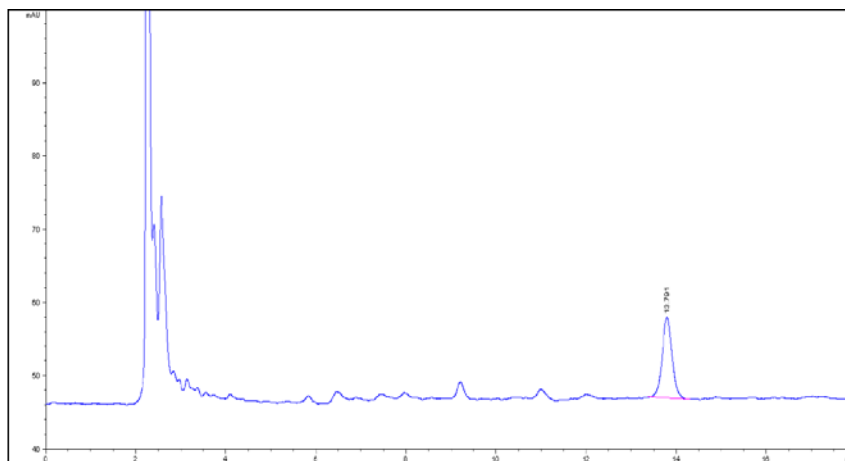
Accurately weigh 0.5 g of the powder in a stoppered conical flask, accurately add 25 mL of ethanol, weigh and allow to soak overnight. Treat ultrasonically for 40 minutes, allow to cool and weigh again, replenish the lost weight with ethanol and mix well. Evaporate accurately 10 mL of the filtrate to dryness, add 10 mL of water and 1 mL of hydrochloric acid, heat under reflux for 2 hours, allow to cool, add a 40 % solution of sodium hydroxide drop-wise, shaking after each drop, until to the color of the solution changes suddenly from orange-yellow to orange-red. Extract with two 30 mL quantities of chloroform, combine the extracts and evaporate to dryness. Dissolve the residue in methanol, transfer to a 10 mL volumetric flask, dilute to volume with methanol and mix well.

Chromatographic conditions

- Column: ZORBAX XDB C18 4.6×250 mm, 5 µm (990967-902)
- Column temperature: 35 °C
- Mobile phase: methanol-water (95:5)
- Evaporator tube temperature: 65 °C
- Air flow rate: 2.0 mL/min
- Flow rate: 1.0 mL/min

Chromatographic system

- Binary Pump (G1312A)
- Manual Injector (G1328B)
- Agilent 1200 Series thermostated column compartment
- Agilent 35900 A/D converter
- ELSD Alltech 2000
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU's)	n	USP T _r
Sarsasapogenin	4.517	13.791	11.09	170.9	19919	0.99