

Kaixiong Shunqi Pills (*Kaixiong Shunqi Wan*) – 开胸顺气丸

Sample source

Commercially available Kaixiong Shunqi Pills

Chemical reference substances

1. Magnolol, 2. Honokiol (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 1. 110729-200308, 2. 110730-9204)

Preparation of test solution

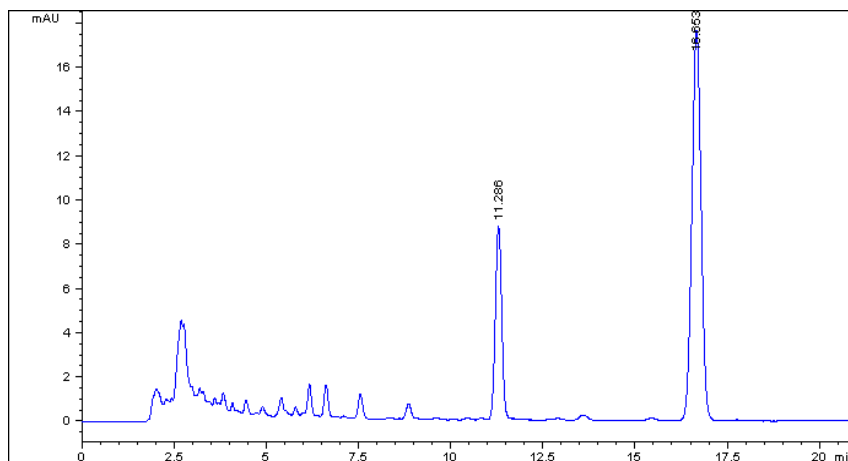
Grind a quantity of the pills to a fine powder. Accurately weigh 2 g in a stoppered conical flask, accurately add 50 mL of methanol and weigh. Treat ultrasonically for 40 minutes and allow to cool. Weigh again and replenish the lost weight with methanol, mix well and filter. Accurately measure 10 mL of the filtrate, evaporate the filtrate to dryness. Dissolve the residue with 20 mL of solution of hydrochloric acid (1:10) in portions, and transfer to a separator. Dissolve the residue with 15 mL of chloroform, in portions, and transfer to the same separator, extract by shaking. Separate the chloroform solution, extract the water solution with two 15 mL quantities of chloroform. Combine the chloroform solution, wash with 20 mL of water. Extract the washings with 10 mL of chloroform. Combine the chloroform extracts, evaporate the solvent to dryness. Dissolve the residue in 90 % methanol, by slightly heating if necessary, and transfer to a 10 mL volumetric flask. Dilute with 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 \times 250 mm, 5 μm (880975-902)
- Column temperature: 25 $^{\circ}\text{C}$
- Mobile phase: acetonitrile-5% glacial acetic acid (54:46)
- Detector wavelength: 294nm
- 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 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 _r
Honokiol	3.514	11.286	8.73	104.3	20746	1.02
Magnolol	5.611	16.653	17.65	305.9	21176	1.00