

Liuwei Dihuang Pills (*Liuwei Dihuang Wan*) – 六味地黄丸

Sample source

Commercially available Liuwei Dihuang Pills

Chemical reference substances

Loganin (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 111640-200401)

Preparation of test solution

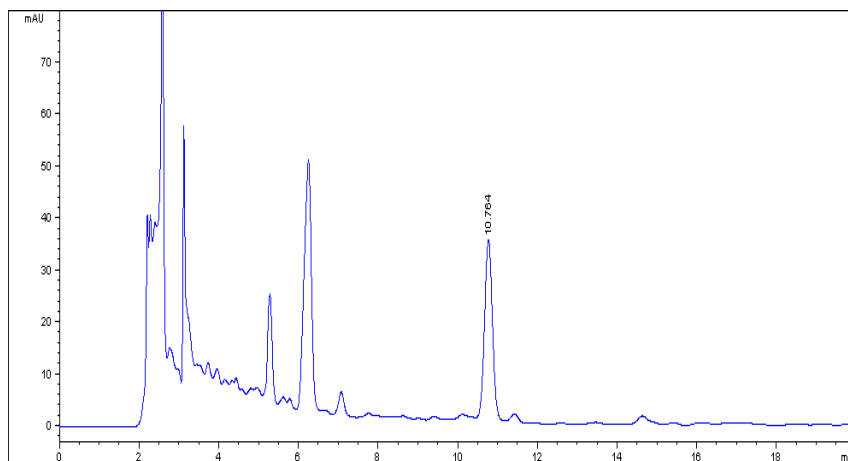
Grind the pills to a fine powder, mix well. Accurately weigh 0.7 g of the powder in a stoppered conical flask, accurately add 25 mL of 50 % methanol, stopper tightly, and weigh. Treat ultrasonicate for 15 minutes, heat under reflux for 1 hour and allow to cool. Weigh again and replenish the lost weight with 50 % methanol, mix well and filter. Accurately measure 10 mL of the filtrate, apply to a column (1 cm in internal diameter) packed with neutral alumina (100-200 mesh, 4 g). Elute with 50 mL of 40 % methanol, collect the eluent. Evaporate to dryness and dissolve the residue in a quantity of 50 % methanol, transfer to a 10 mL volumetric flask, dilute with 50 % methanol to volume, and mix well.

Chromatographic conditions

- Column: ZORBAX SB C18 4.6×250 mm, 5 μm (880975-902)
- Column temperature: 25 °C
- Mobile phase: acetonitrile-methanol-tetrahydro-furan-0.05% phosphoric acid (8:4:1:87)
- Detector wavelength: 236 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 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
Loganin	3.306	10.764	34.47	471.3	14401	1.00