Huoxue Zhitong Powder *(Huoxue Zhitong San)* – 活血止痛散

Sample source

Co mmercially available Huoxue Zhitong Powder

Chemical reference substances

Ferulic acid (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 110773-9910)

Preparation of test solution

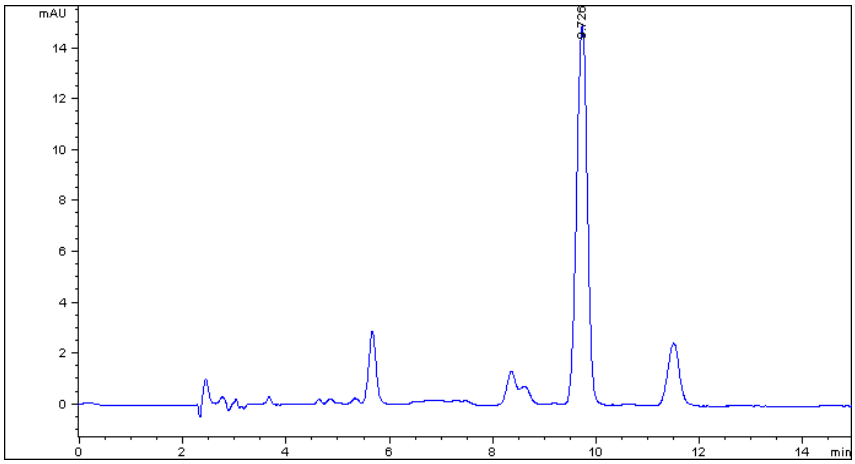
Accurately weigh about 2.3 g of the powder in a stoppered conical flask, add 20 mL of a 0.5 % solution of sodium carbonate, treat ultrasonically for 30 minutes, transfer the solution to a centrifuge tube, centrifugate at 3000 rpm for 10 minutes, and transfer the supernatant to a separating funnel. Wash the precipitate with three 10 ml quantities 0.5 % solution of sodium carbonate, combine the washings in the same separating funnel, extract with three 20 ml quantities of ether saturated with 2 % solution of sodium chloride, discard the ether layer and adjust the solution pH to 1-2 with hydrochloric acid, then extract the solution with two 25 ml and two 20 ml quantities of ether saturated with 2 % solution of sodium chloride. Combine the ether layer and remove the solvent from the extract to dryness, dissolve the residue in methanol and transfer to a 25 mL amber volumetric flask, dilute with methanol to volume, mix well.

Chromatographic conditions

- Column: ZORBAX SB C18 4.6×250 mm, 5 µm (880975-902)
- Column temperature: 25 °C
- Mobile phase: acetonitrile-methanol-1 % glacial acetic acid (14.2:14.2:71.6)
- Detector wavelength: 313 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 thermostatted 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_f
Ferulic acid	2.890	9.726	14.92	215.5	10403	0.96