

Maren Runchang Pills (*Maren Runchang Wan*) – 麻仁润肠丸

Sample source

Commercially available Maren Runchang Pills

Chemical reference substances

1. Emodin, 2. Chrysophanol
(National Institute for the Control of Pharmaceutical and Biological Products, Batch number 1. 110756-200210, 2. 110796-200309)

Preparation of test solution

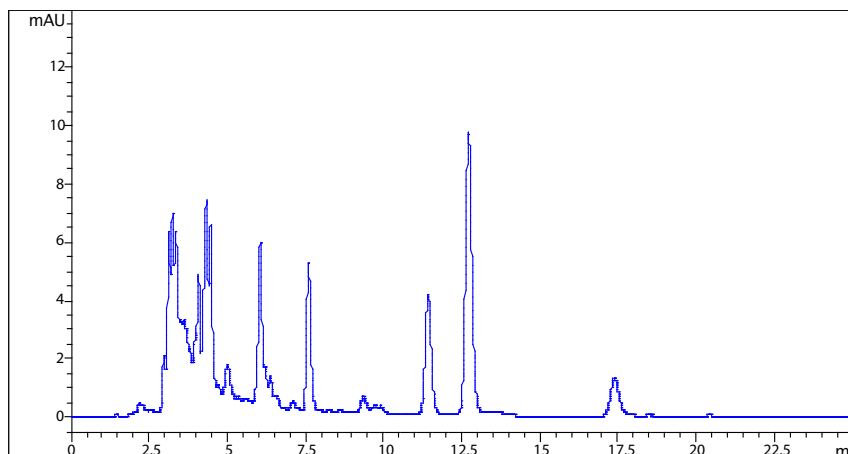
Cut a quantity of the pills into pieces. Accurately weigh 1 g, grind well with 1.5 g of kieselguhr, transfer to a Soxhlet extractor, add a quantity of ethanol, and heat under reflux to the extract colorless. Transfer the extract solution to a 50 mL volumetric flask, dilute to volume with ethanol and shake well. Accurately measure 10 mL of the solution in a flask, and evaporate to near dryness on a water bath. Add 15 mL of a mixture of hydrochloric acid and 30 % solution of methanol (1:10), heat on a water bath for 1 hour, and cool immediately. Extract the solution with four 15 mL quantities of chloroform by shaking, combine the chloroform solution, and evaporate to dryness. Dissolve the residue in a quantity of methanol, transfer to a 10 mL volumetric flask, dilute to volume, mix well, filter through a millipore membrane (0.45 μm), and use the filtrate as the test solution.

Chromatographic conditions

- Column: Agilent TC-C18, 4.6 \times 250 mm, 5 μm (518925-902)
- Column temperature: 27 $^{\circ}\text{C}$
- Mobile phase: methanol-0.1% phosphoric acid (80:20)
- Detector wavelength: 254nm
- 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	Ret Time (min)	Height (mAU)	Area (mAU*s)	n	USP T _r
Emodin	11.424	4.03	53.5	17823	1.06
Chrysophanol	12.721	9.54	134.0	19659	1.07