

Rhubarb Liquid Extract (*Extractum Rhei Liquidom*) – 大黄流浸膏

Sample source

Commercially available Radix et Rhizoma Rhei

Chemical reference substances

1. Emodin, 2. Chrysophanol
(National Institute for the Control of Pharmaceutical and Biological Products, Batch number 1. 0796-200309, 2. Chrysophanol)

Preparation of test solution

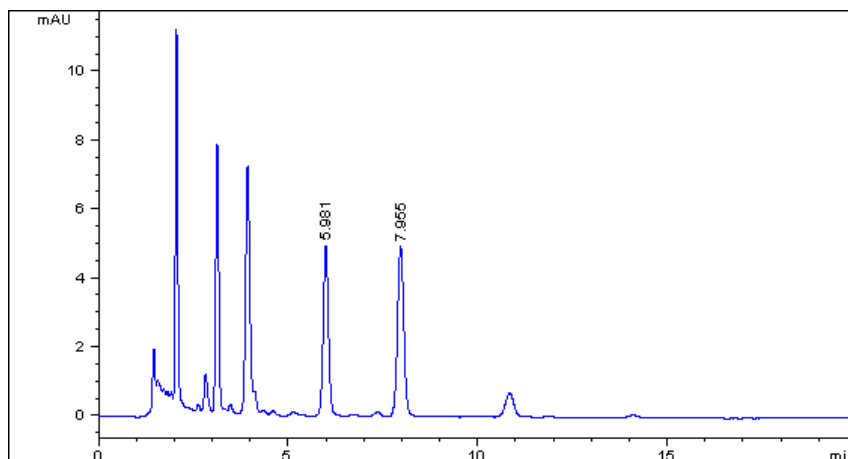
Soak 500 g of the coarse powder in 60 % ethanol for 24 hours and slowly percolate at about 1-3 mL per minute. Reserve 425 mL of the initial percolate and continue to percolate until the percolate becomes pale in color. Concentrate the successive percolate to a thick extract, mix well with the initial percolate and dilute with 60 % ethanol to give a volume of 500 mL. Allow to stand until the fluid becomes clear and filter.

Chromatographic conditions

- Column: ZORBAX SB C18 4.6×150 mm, 5 µm (883975-902)
- Column temperature: 25 °C
- Mobile phase: methanol-0.1 % phosphoric acid (80:20)
- Detector wavelength: 254 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 |
|--------------|-------|----------------|--------------|--------------|-------|--------------------|
| emodin | 2.987 | 5.981 | 4.91 | 46.5 | 9559 | 1.04 |
| chrysophanol | 4.303 | 7.955 | 4.92 | 56.6 | 11275 | 1.03 |