

CoreFocus
Report
No.294

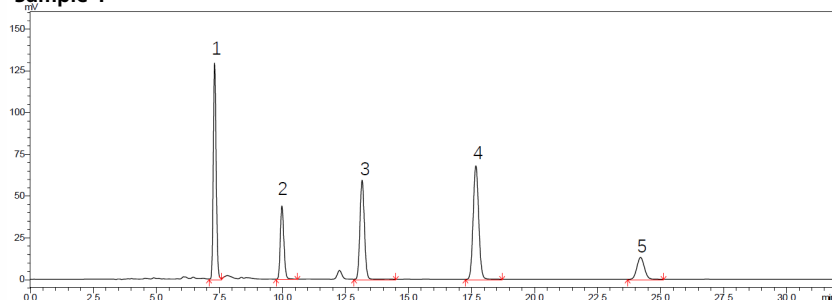
LC Reversed-phase Shim-pack Series

Shim-pack™ GIS C18

Analysis of Total Anthraquinone in *Rhubarb*

Keywords: herbal medicine

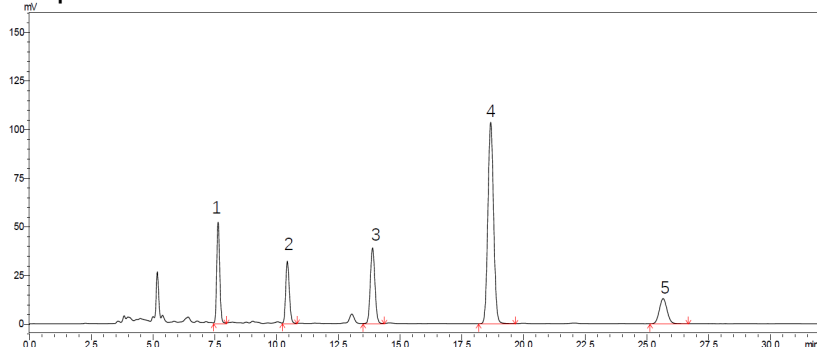
Sample 1



1. Aloe-Emodin
2. Rhein
3. Emodin
4. Chrysophanol
5. Emodin methyl ether

Sample 1: Reference solution
Aloe-emodin in methanol (16 µg/mL)
Rhein in methanol (16 µg/mL)
Emodin in methanol (16 µg/mL)
Chrysophanol in methanol (16 µg/mL)
Emodin methyl ether reference in methanol (8 µg/mL)

Sample 2



Sample 2: Test solution
Weigh 0.15 g of the powder and place it in a conical flask with stopper. Add 25 mL Methanol, weigh it, heat it to reflux for 1 hour, after cooling, weigh it again. Use methanol make up for the lost weight, shake well, and filter. Measure 5 mL of the continuous filtrate, place it in a flask, evaporate the solvent, add 10 mL of 8 % hydrochloric acid solution, sonicate for 2 minutes, add 10 mL of chloroform, heat to reflux for 1 hour, after cooling, place in a separatory funnel, and use a small amount wash the container with chloroform and put it into a separatory funnel. Divide the chloroform layer, extract the acid solution with chloroform 3 times, 10 mL each time, combine the chloroform solution, recover the solvent under reduced pressure to dryness, add the residue dissolve with methanol, transfer to a 10 mL measuring flask, add methanol to the mark.

Column	: Shim-pack GIS C18 (250 mm x 4.6 mm I.D., 3 µm), P/N : 227-30096-32
Mobile phase	: 0.1 % Phosphoric acid : Methanol = 15 : 85
Flow rate	: 0.8 mL/min
Column temp.	: 40 °C
Injection vol.	: 20 µL
Vial	: SHIMADZU LabTotal™ Vial for LC/LCMS, P/N : 227-34001-01
Detection	: UV at 254 nm

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