

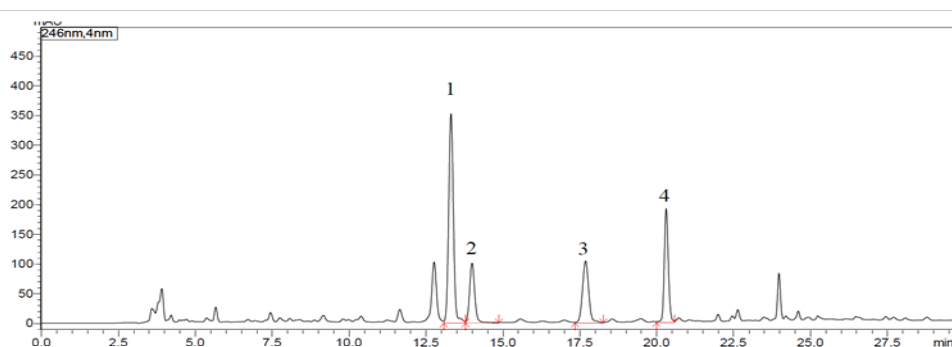
CoreFocus
Report
No.13

LC Reversed-phase Shim-pack Series

Shim-pack™ GISS C18
Analysis of Notopterol, Phenylethanol
Ferulate, Isoperatorin and Fusarium diol
in *Nopterygium*

Keywords: Chinese herbal medicine, furanocoumarin, anti-inflammatory, analgesic

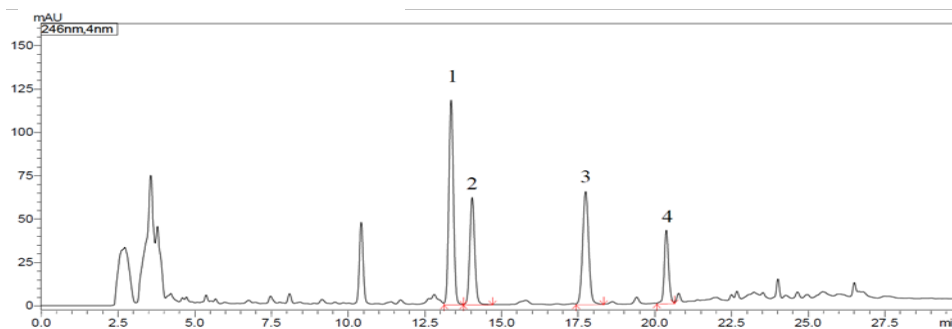
Chromatogram of Standard Mix



1. Notopterol
2. Phenylethanol Ferulate
3. Isoperatorin
4. Fusarium diol

Standard Mix
Notopterol Phenylethanol Ferulate
Isoperatorin
Fusarium diol
(2 mg/mL in Methanol)

Chromatogram of *Nopterygium*



Pretreatment procedure

- a. Collect sample (commercially available *Nopterygium* powder) and passed through No. 3 sieve.
- b. Weigh 0.4 g of sample and transfer into a stoppered conical flask.
- c. Add 50 mL of Methanol into flask.
- d. Close the stopper and reweigh.
- e. Ultrasonically treat it (power 250 W, frequency 50 kHz) for 30 minutes.
- f. After cooling, weigh the conical flask.
- g. Add Methanol to bring the final weight to the pre-reflux weight (Step d).
- h. Shake well and filter into a sample vial.

Column : Shim-pack GISS C18, (250 mm x 4.6 mm I.D., 5 μm), P/N: 227-30061-07
 Mobile phase : A) 0.1% Phosphate Buffer
 : B) Acetonitrile
 Time program : B Conc. 48% (0.0 min) → 53% (6.0-12.0 min) → 80% (20.0-30.0 min)
 Flow rate : 1.0 mL/min
 Column Temperature : 25°C
 Injection volume : 10 μL
 Detection : UV 246 nm
 Vial : LabTotal™ Vial for LC/ LCMS, P/N: 227-34001-01

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