

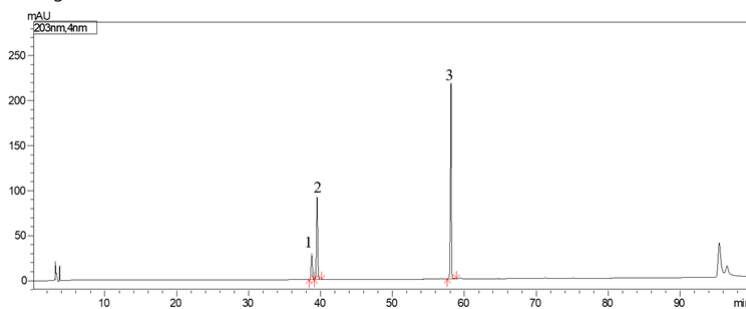
CoreFocus
Report
No.62

LC Reversed-phase Shim-pack Series

Shim-pack™ GISS C18
Analysis of Ginsenosides in *American Ginseng*

Keywords: panaxosides, triterpene saponins

Chromatogram of Standard Mix



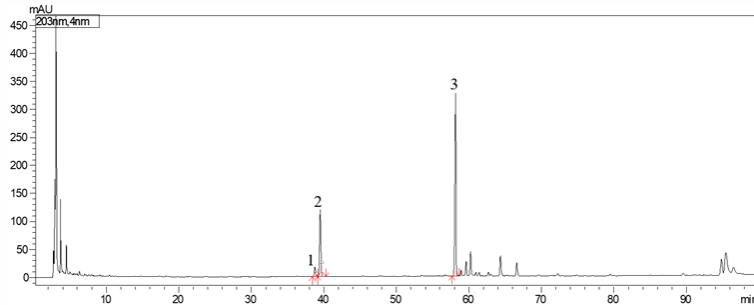
1. Ginsenosides Rg₁
2. Ginsenosides Re
3. Ginsenosides Rb₁

Standard Mix

Ginsenosides Rg₁ (0.1 mg/mL in Methanol)
Ginsenosides Re (0.4 mg/mL in Methanol)
Ginsenosides Rb₁ (1 mg/mL in Methanol)

- a. Weigh 1 g of the sample (commercially available *American Ginseng* powder) and transfer into a stoppered conical flask.
- b. Add 50 mL of water-saturated n-butanol.
- c. Close the stopper and reweigh.
- d. Heat to reflux for 1.5 hours.
- e. After cooling, weigh the conical flask.
- f. Add with n-butanol saturated with water to bring the final weight to the pre-reflux weight (Step c).
- g. Shake well and filter.
- h. Accurately measure 25 mL of the filtrate, transfer it in an evaporating dish.
- i. Evaporate to dryness.
- j. Add an appropriate amount of 50% methanol to dissolve the residue.
- k. Transfer into a 10 mL measuring flask.
- l. Add 50% Methanol and dilute to the mark.
- m. Shake well filter into a sample vial.

Chromatogram of *American Ginseng*



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% Phosphoric acid aqueous solution B) Acetonitrile
Gradient Program	: 19%B (0 min) – 20%B(25 min) – 40%B(60 min) – 55%B(90 min) – 60%B (100 min)
Flow rate	: 1.0 mL/min
Column temp.	: 40°C
Injection vol.	: 10 μL
Vial	: LabTotal™ Vial for LC/LCMS, P/N : 227-34001-01
Detection	: UV at 203 nm

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