

# Ginseng (*Radix et Rhizoma Ginseng*) – 人參

## Sample source

Commercially available Ginseng

## Chemical reference substances

1. Ginsenoside Rb1, 2. Ginsenoside Rg1, 3. Ginsenoside Re (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 2. 110703-200322, 3. 0754-9912)

## Preparation of test solution

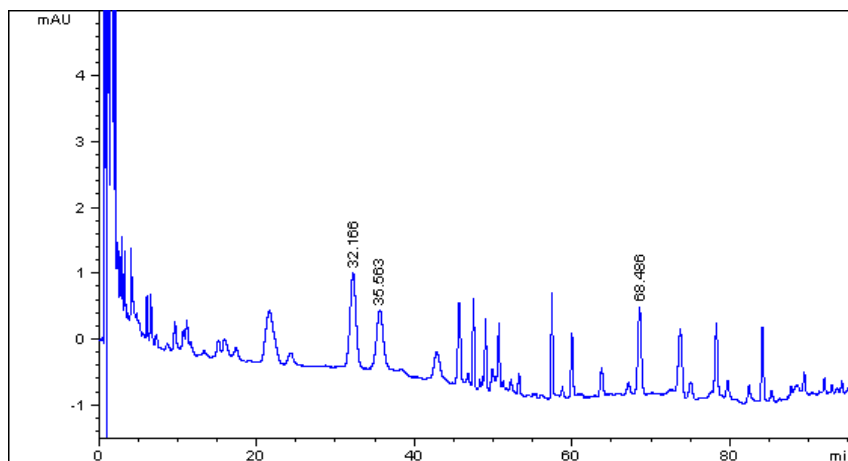
Accurately weigh 1 g of the powder in a Soxhlet extractor, add a quantity of chloroform, heat under reflux on a water bath for 3 hours, discard the chloroform solution, evaporate the solvent from the residue. Transfer the residue with the extractor to a 100 mL conical flask. Accurately add 50 mL n-butanol saturated with water, stopper tightly, allow to stand overnight, treat ultrasonically for 30 minutes and filter. Evaporate accurately 25 mL of the filtrate to dryness in an evaporating dish, dissolve the residue in methanol, transfer to a 5 mL volumetric flask, dilute with methanol to volume and mix well. Filter and use the filtrate as the test solution.

## Chromatographic conditions

- Column: ZORBAX SB C18 4.6×150 mm, 5 μm (883975-902)
- Column temperature: 25 °C
- Mobile phase: A: acetonitrile, B: water; 0-35 min, A: 19 %; 35-55 min, A: 19-29 %; 55-70 min, A: 29 %; 70-100 min, A: 29-40 %
- Detector wavelength: 203 nm
- Flow rate: 1.0 mL/min
- Injection volume: 10 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 <sub>r</sub>
ginsenoside Rg1	20.444	32.166	1.44	75.1	8831	0.98
ginsenoside Re	22.709	35.563	0.89	53.4	8327	1.00
ginsenoside Rb1	44.657	68.486	1.33	40.6	119699	0.97