

Red Ginseng (*Radix et Rhizoma Ginseng Rubra*) – 红参

Sample source

Commercially available Red 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

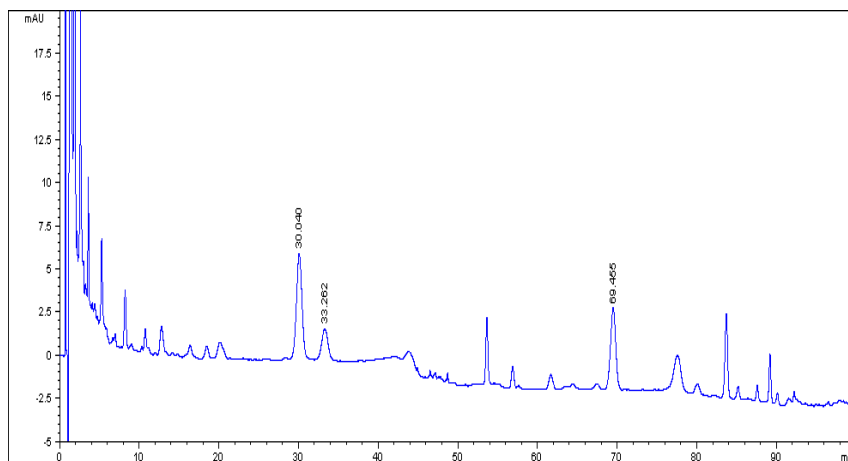
Accurately weigh 1 g of the powder in a Soxhlet extractor, add a quantity of chloroform, heat under reflux on a water bath for 3 hours, discard the chloroform solution, evaporate the solvent from the residue. Transfer the residue with the extractor to a 100 mL conical flask. Accurately add 50 mL n-butanol saturated with water, tightly stopper, allow to stand overnight, treat ultrasonically for 30 minutes and filter. Accurately evaporate 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 XDB C18, 4.6×150 mm, 5 μm (993967-902)
- Column temperature: 25 °C
- Mobile phase: A: acetonitrile, B: water; 0-40 min, A: 19 %; 40-45 min, A: 19-28 %; 45-75 min, A: 28 %; 75-100 min, A: 28-40 %
- Detector wavelength: 203 nm

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 diode-array detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU's)	n	USP T _r
ginsenoside Rg1	19.026	30.04	6.16	303.0	8834	1.00
ginsenoside Re	21.175	33.262	1.85	104.0	8213	0.98
ginsenoside Rb1	45.304	69.455	4.72	217.1	52506	0.96