

American Ginseng (*Radix Panacis Quinquefolii*) – 西洋参

Sample source

Commercially available American 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

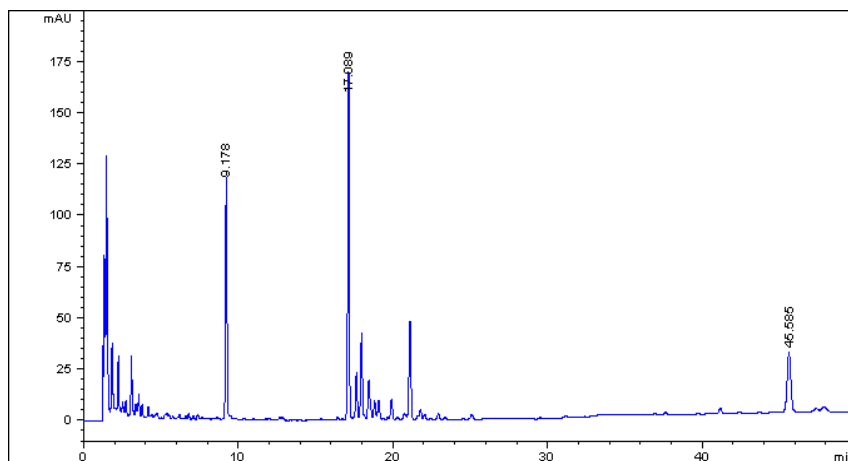
Accurately weigh 1 g of the powder in a stoppered conical flask, accurately add 50 mL of n-butanol saturated with water and weigh. Heat under reflux on a water bath for 1.5 hours, allow to cool and weigh again, replenish the lost solvent with n-butanol saturated with water, mix well and filter. Evaporate accurately 25 mL of the filtrate to dryness in an evaporating dish, dissolve the residue in 50 % methanol, transfer to a 10 mL volumetric flask, dilute with 50 % 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: 40 °C
- Mobile phase: A: 0.1 % phosphoric acid, B: acetonitrile; 0-15 min, 19-20 %; 15-30 min, 20-35 %; 30-35 min, 35-55 %; 35-45 min, 55-60 %
- Detector wavelength: 203 nm
- Flow rate: 1.0 mL/min
- Inject volume: 3 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 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	5.118	9.178	115.45	780.2	46664	1.03
ginsenoside Rb1	10.393	17.089	156.97	1174.6	132102	0.93
ginsenoside Re	29.390	45.585	29.06	477.0	184195	1.01