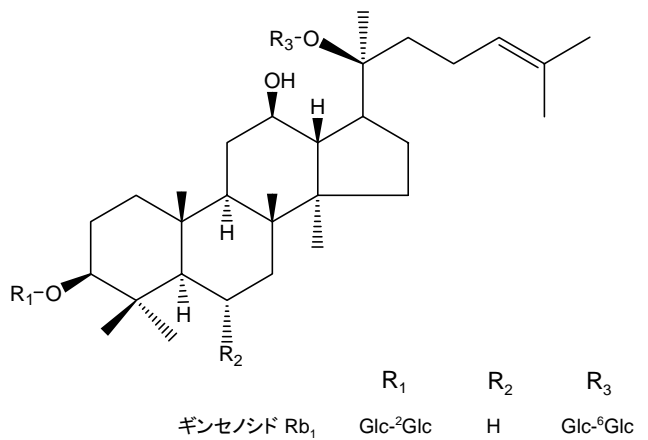


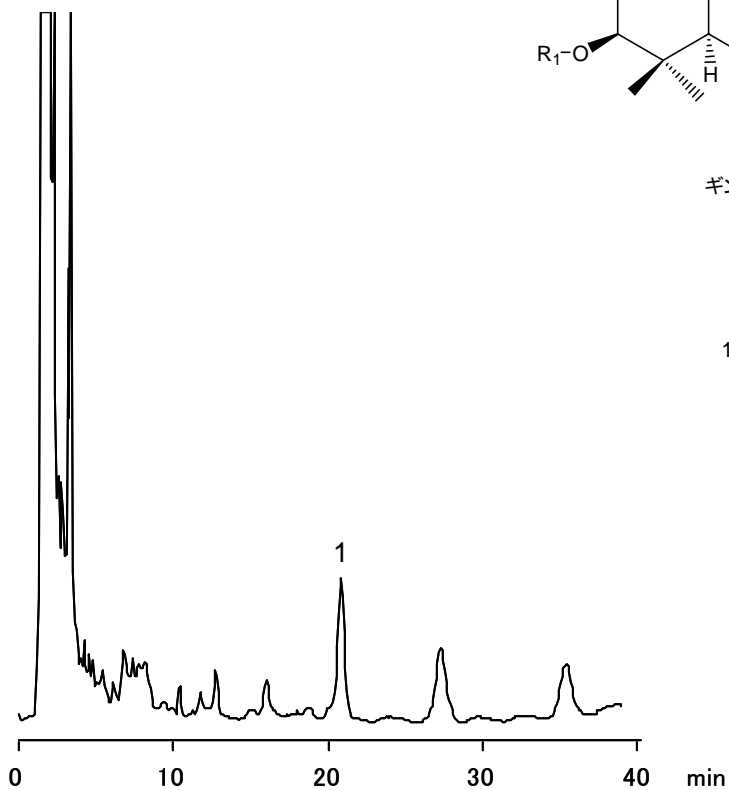
ニンジン中ギンセノシド Rb₁ Ginsenoside Rb₁

ニンジン（人参）は、日本薬局方収載の生薬で、古くから強壯、強心、健胃、鎮静薬として用いられてきました。非常に多くの薬理作用を持ち、漢方薬では人参湯、小柴胡湯などに広く用いられドリンク剤にも配合されている生薬です。

Ginseng is one of the crude medicines listed in The Japanese Pharmacopoeia. It has various pharmacological properties, and has long been used as antiasthenic drug, cardiac restorative, stomachic, and sedative.



1. ギンセノシド Rb₁
Ginsenoside Rb₁ (M.W. 1109.3)



【HPLC Conditions】

Column	: CAPCELL PAK C ₁₈ MGII S5 ; 4.6 mm i.d. x 150 mm
Mobile phase	: H ₂ O / CH ₃ CN = 70 / 30
Flow rate	: 0.8 mL/min
Temperature	: 40 °C
Detection	: UV 203 nm
Inj. vol.	: 20 μL
Pretreatment	: Ginseng was cut into pieces, and ground in a mortar with a pestle. 1 g of the ground ginseng was dispersed in a mixed solvent (30 mL, water / methanol = 2 / 3). The dispersion was sonicated (15 min), and centrifuged (15000 rpm, 10 min). The supernatant was collected. Another 15 mL of the mixed solvent added to the precipitation. Sonication and centrifugation were repeated. Both supernatants were added together, and adjusted to 50 mL in a volumetric flask with the extracting solvent . Then, 10 mL of the solution and 3 mL of 0.1 mol/L NaOH were added together, and left for 30 min. 3 mL of 0.1 mol/L NaOH was added to the solution again. The volume was adjusted to 20 mL in a volumetric flask with the extracting solvent. Then, a small amount of the solution was filtered with a 0.2-mm filter, and introduced to HPLC. ※ 1 μg/mL = 1 ppm

【References】

- 1) The Japanese Pharmacopoeia, (14th ~ 15th Edition) 第 14 ~ 15 改正, 日本薬局方