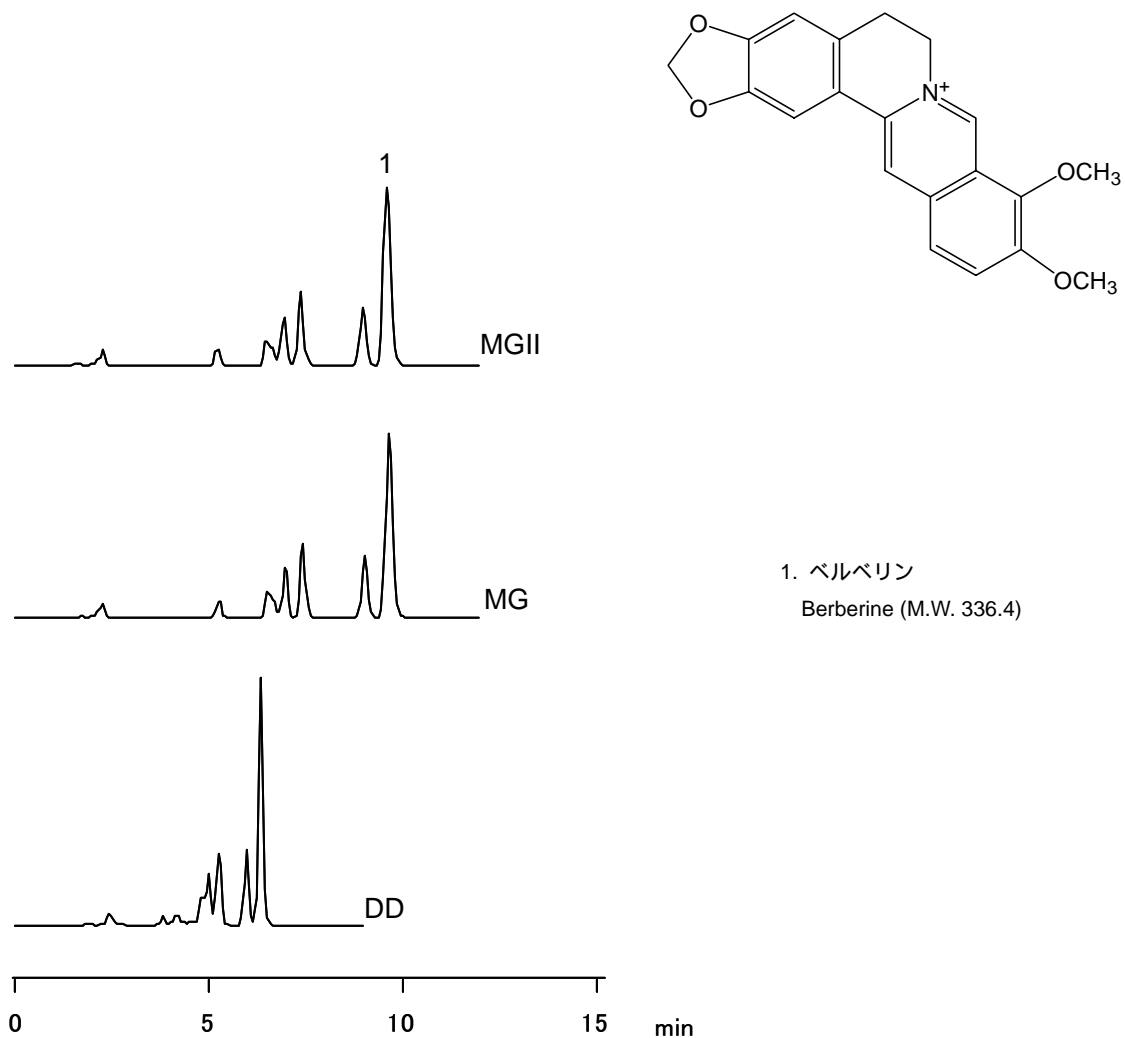


## オウレン中ベルベリン Berberine

オウレンは日本薬局方収載の生薬です。オウバクと同様に止瀉薬、健胃薬として用いられています。

Coptis rhizome is one of the crude medicines listed in The Japanese Pharmacopoeia. Similar to phellodendron bark, it is mainly used as antidiarrheal and stomachic, and formulated into many Chinese medicines.



#### 【HPLC Conditions】

Column : CAPCELL PAK C<sub>18</sub> MGII S5 ; 4.6 mm i.d. x 150 mm  
: CAPCELL PAK C<sub>18</sub> MG S5 ; 4.6 mm i.d. x 150 mm  
: CAPCELL PAK C<sub>8</sub> DD S5 ; 4.6 mm i.d. x 150 mm

Mobile phase : CH<sub>3</sub>CN / H<sub>2</sub>O / KH<sub>2</sub>PO<sub>4</sub> / Sodium dodecyl sulfate  
= 500 mL / 500 mL / 3.4 g / 1.7 g

Flow rate : 0.7 mL/min

Temperature : 40 °C

Detection : UV 345 nm

Inj.vol. : 10 μL

Pretreatment : Coptis rhizome was cut into small pieces, and ground in a mortar with a pestle. 0.5 g of the ground coptis rhizome was dispersed in a solution (30 mL, 10 w/v% HCl / CH<sub>3</sub>OH = 1 / 100). The dispersion was refluxed on a water bath for 30 min. After cooling it down, the dispersion was filtered with filter paper. The residue was rinsed with the solution. The filtered liquid and the solution used for rinsing were added together and adjusted to 100 mL in a volumetric flask. A small amount of the solution was further filtered with a 0.2-μm 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