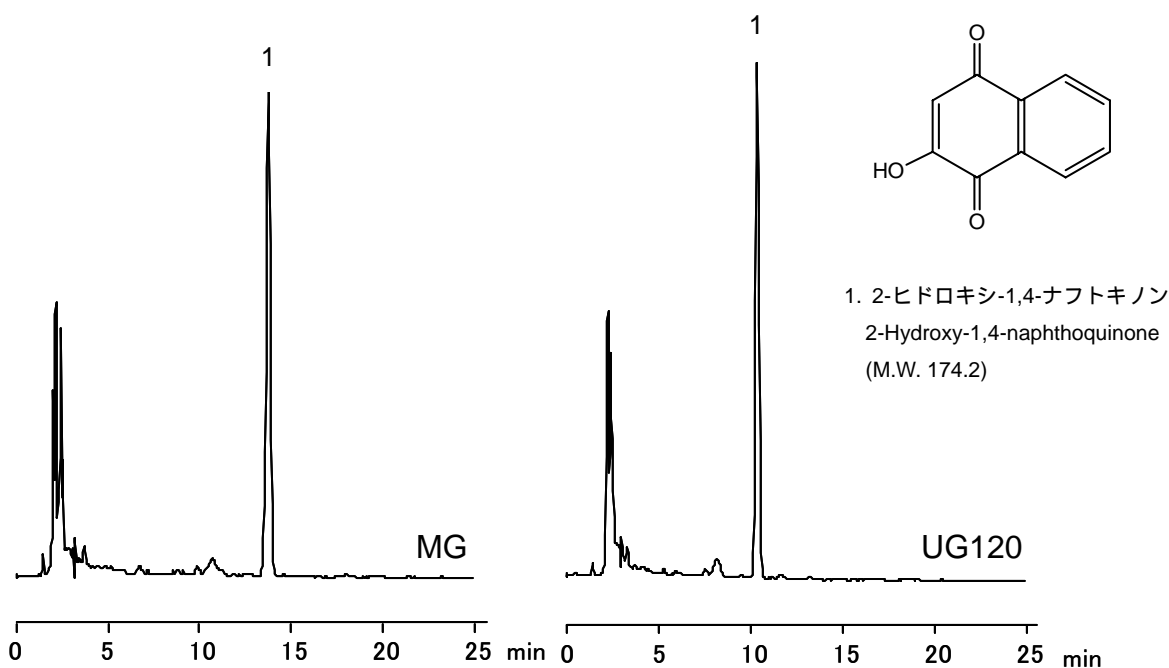


## 2-ヒドロキシ-1,4-ナフトキノン 2-Hydroxy-1,4-naphthoquinone

白髪染めとして用いられているヘナ中に含まれる色素成分 2-ヒドロキシ-1,4-ナフトキノン (別名:ローソン) の分析例です。今回は, CAPCELL PAK C<sub>18</sub> MG 及び UG120 による分析例を示します。

Also known as "lawson", the pigment is contained in henna, a substance used as dye for white hair. Chromatograms were obtained with both CAPCELL PAK C<sub>18</sub> MG and UG120 columns.



### 【HPLC Conditions】

Column : CAPCELL PAK C<sub>18</sub> MG S5 ; 4.6 mm i.d. x 250 mm  
CAPCELL PAK C<sub>18</sub> UG120 S5 ; 4.6 mm i.d. x 250 mm

Mobile phase : 10 mmol/L KH<sub>2</sub>PO<sub>4</sub> (adjusted at pH 7.5 with 3 mol/L KOH) /  
CH<sub>3</sub>OH = 4 / 1

Flow rate : 1 mL/min

Temperature : 40 °C

Detection : UV 275 nm

Inj. vol. : 10 μL

Pretreatment : 10mL of extracting buffer \*1 was added to 0.05 g of henna powder. After 15 min, the mixture was sonicated (60°C, 15 min), and centrifuged (3000 rpm, 5 min). 2 mL of the supernatant was collected and mixed with 1.34 mL of methanol. The mixed liquid was diluted to 10 mL with another mixed liquid (the extracting buffer / methanol = 6 / 4).

\*1 Extracting buffer : A buffer solution (10 mmol/L KH<sub>2</sub>PO<sub>4</sub> / 10 mmol/L Na<sub>2</sub>HPO<sub>4</sub> = 1 / 1) was adjusted at pH 8 with 3 mol/L KOH.

※ 1 μg/mL = 1 ppm