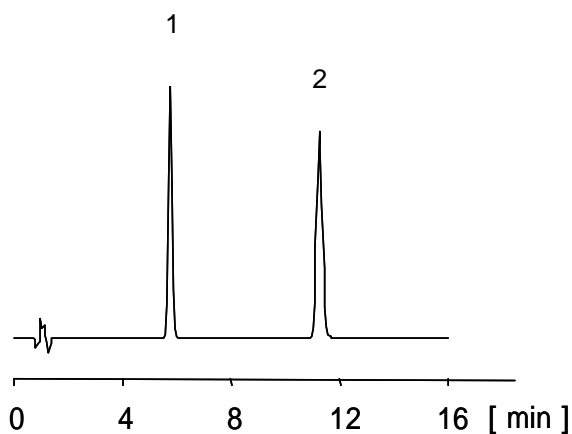


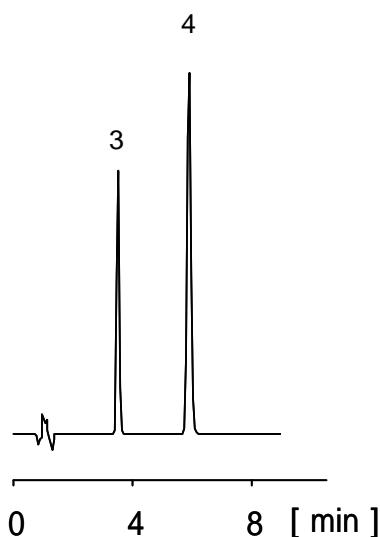
## デキサメタゾン Dexamethasone

日本薬局方におけるカラム選定条件は、「*p*-オキシ安息香酸メチル、*p*-オキシ安息香酸エチルの順に溶出し、その分離度が5以上あるものを用いる」と定められています。また、局方ではカラム長約 30 cm と定められていますが、CAPCELL PAK C<sub>18</sub> MGII は保持が大きく分離能に優れているため、15 cm のカラムにて分離度 12.9 を示しました。カラム長を短くすることで、短時間分析が可能です。

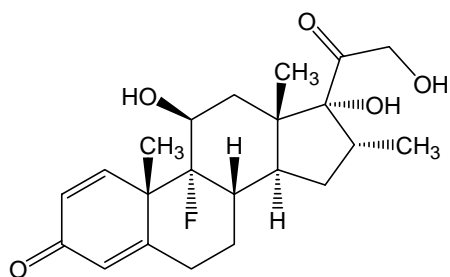
The Japanese Pharmacopoeia (JP) requires a column to elute compounds in the order of methyl *p*-hydroxybenzoate and ethyl *p*-hydroxybenzoate, with a resolution value of 5 or greater between the two compounds. Although JP shows an example with a 30-cm column, a 15-cm column of CAPCELL PAK C<sub>18</sub> MGII showed a resolution of 12.9, saving time to a large extent.



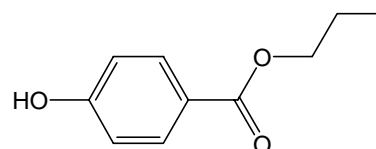
1. デキサメタゾン (100 µg/mL)  
Dexamethasone (M.W. 392.5)
2. *p*-オキシ安息香酸プロピル (I.S.) (50 µg/mL)  
Propyl *p*-hydroxybenzoate (I.S.) (M.W. 180.2)



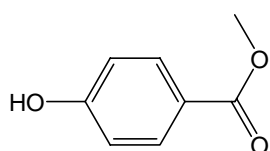
3. *p*-オキシ安息香酸メチル (20 µg/mL)  
Methyl *p*-hydroxybenzoate (M.W. 152.2)
4. *p*-オキシ安息香酸エチル (40 µg/mL)  
Ethyl *p*-hydroxybenzoate (M.W. 166.2)



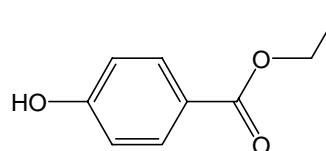
1. Dexamethasone



2. Propyl *p*-hydroxybenzoate



3. Methyl *p*-hydroxybenzoate



4. Ethyl *p*-hydroxybenzoate

[HPLC Conditions]

Column : CAPCELL PAK C<sub>18</sub> MGII S5 ; 4.6 mm i.d. x 150 mm  
 Mobile phase : H<sub>2</sub>O / CH<sub>3</sub>CN = 2 / 1  
 Flow rate : 1.5 mL/min  
 Temperature : 25 ° C  
 Detection : UV 254 nm  
 Inj. vol. : 10 µL  
 Sample dissolved in : 50 vol% CH<sub>3</sub>OH  
 1 µg/mL = 1 ppm