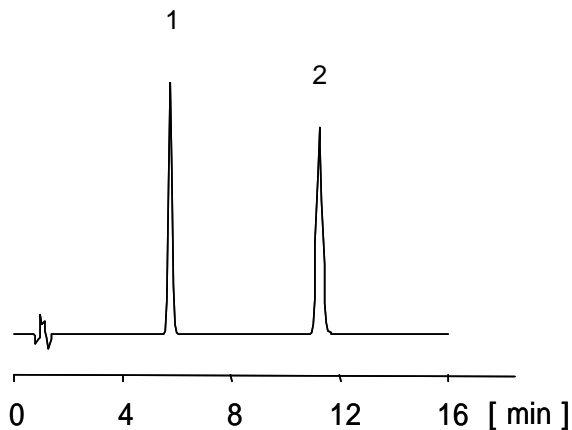


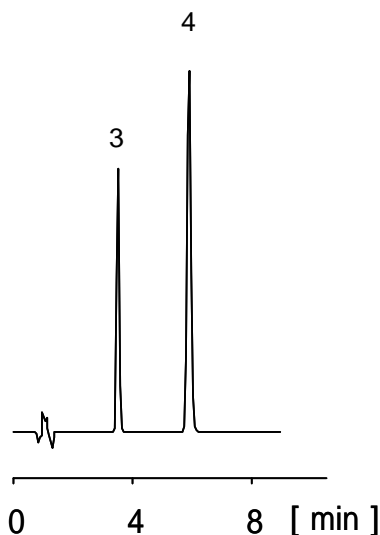
デキサメタゾン Dexamethasone

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 C₁₈ 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。

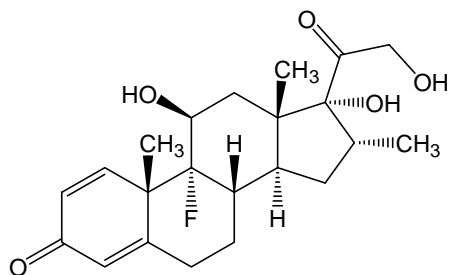
The Japanese Pharmacopoeia (JP) requires a column to elute compounds in the order of methyl *p*-hydroxybenzoate and ethyl *p*-hydroxybenzoate, with a resolution value of 5 or greater between the two compounds. Although JP shows an example with a 30-cm column, a 15-cm column of CAPCELL PAK C₁₈ MGII showed a resolution of 12.9, saving time to a large extent.



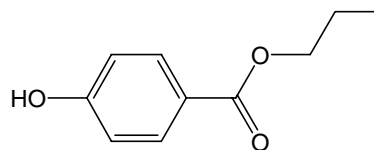
1. デキサメタゾン (100 µg/mL)
Dexamethasone (M.W. 392.5)
2. *p*-オキシ安息香酸プロピル (I.S.) (50 µg/mL)
Propyl *p*-hydroxybenzoate (I.S.) (M.W. 180.2)



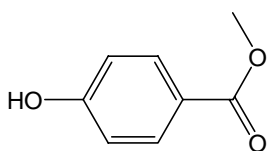
3. *p*-オキシ安息香酸メチル (20 µg/mL)
Methyl *p*-hydroxybenzoate (M.W. 152.2)
4. *p*-オキシ安息香酸エチル (40 µg/mL)
Ethyl *p*-hydroxybenzoate (M.W. 166.2)



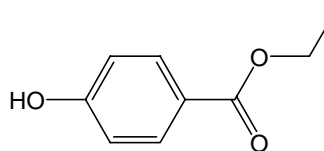
1. Dexamethasone



2. Propyl *p*-hydroxybenzoate



3. Methyl *p*-hydroxybenzoate



4. Ethyl *p*-hydroxybenzoate

[HPLC Conditions]

| | |
|---------------------|--|
| Column | : CAPCELL PAK C ₁₈ MGII S5 ; 4.6 mm i.d. x 150 mm |
| Mobile phase | : H ₂ O / CH ₃ 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 ₃ OH |
| | 1 μg/mL = 1 ppm |