

## Analysis of pharmaceuticals and crude drugs (1)/医薬品・生薬の分析(1)

### (1) Analysis of indomethacin/インドメタシンの分析

Sample of indomethacin was analyzed. Indomethacin is a nonsteroidal anti-inflammatory drug. 非ステロイド系抗炎症剤の一つであるインドメタシンの分析例を紹介します。

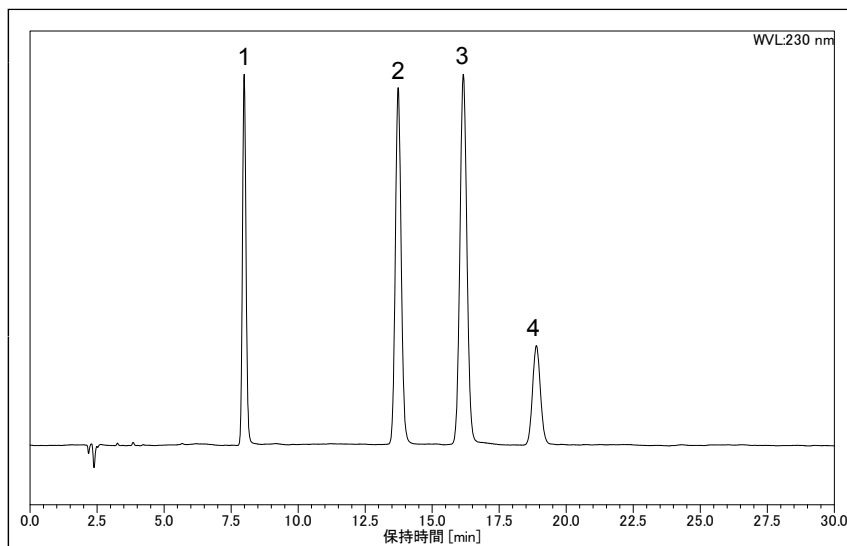


Fig.1 Analysis of Indomethacin (Standard)

#### Conditions;

Column: Develosil ODS-HG-5  
(4.6x250mm)

Mobile phase: Acetonitrile/0.1%-  
Phosphoric acid=50/50

Flow rate: 1.0ml/min

Temperature: 30°C

Detection: UV230nm(PDA)

Sample: Ketoprofen/Flurbiprofen

Indomethacin/Ibuprofen

Concentration: 10ppm

Injection volume: 20uL

System: DIONEX/Ultimate 3000 Series

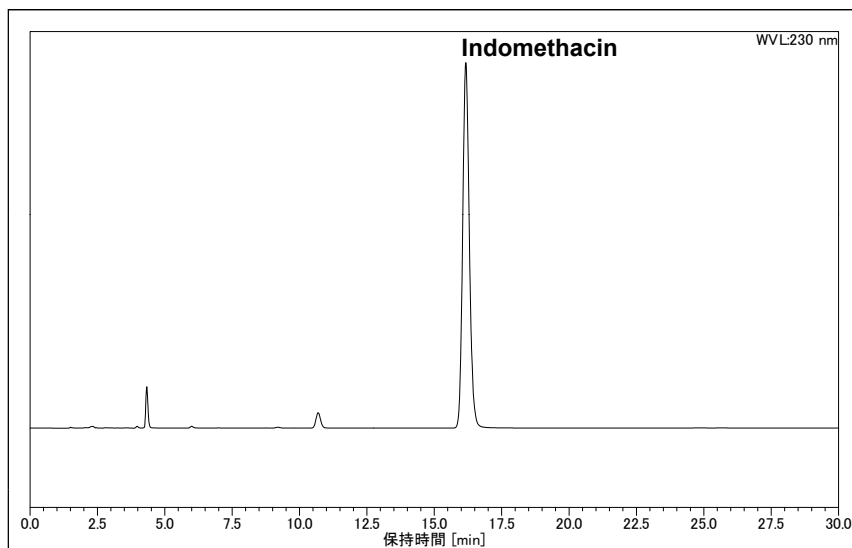


Fig.2 Analysis of indomethacin of commercial antiinflammatory

#### Conditions;

Column: Develosil ODS-HG-5  
(4.6x250mm)

Mobile phase: Acetonitrile/0.1%-  
Phosphoric acid=50/50

Flow rate: 1.0ml/min

Temperature: 30°C

Detection: UV230nm(PDA)

Injection volume: 20uL

System: DIONEX/Ultimate 3000 Series

## (2) Analysis of xathines/キサンチン類の分析

Analysis of caffeine (trimethyl), theobromine, and theophylline (dimethyl) of cantansine was performed on a HILIC column

キサンチン類のカフェイン(トリメチル体), テオブロミン・テオフィリン(ジメチル体)の分析をHILICカラムにて行いました。

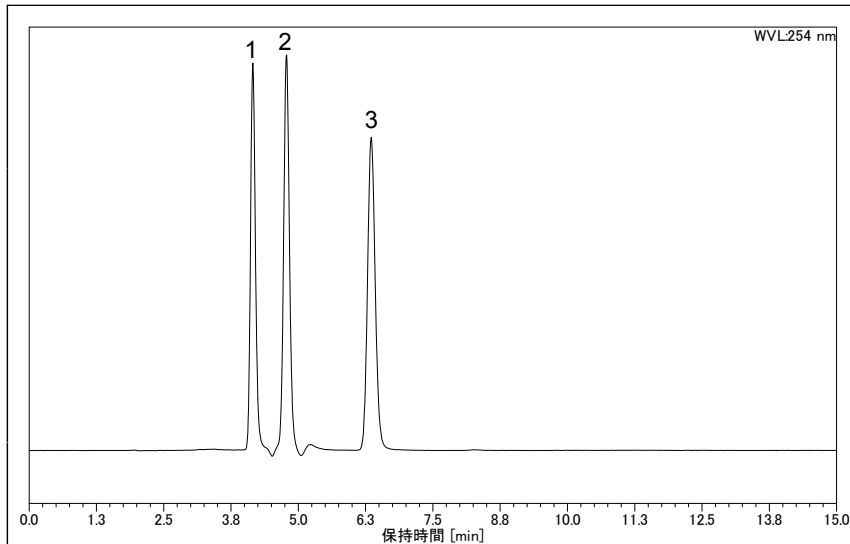


Fig.3 Analysis of Xanthine derivative

### Conditions;

Column: Develosil ANIDIUS  
(4.6x150mm)

Mobile phase: Acetonitrile/Water=85/15

Flow rate: 0.5ml/min

Temperature: 30°C

Detection: UV254nm(PDA)

Sample: Caffeine/Theobromine  
/Theophylline

Final Concentration: 10ppm

Injection volume: 10uL

System: DIONEX/Ultimate 3000 Series

## (3) Analysis of glycyrrhizic acid/グリチルリチン酸の分析

Mobile phases and samples were prepared in accordance to Japanese Pharmacopoeia. 生薬の甘草の主成分であるグリチルリチン酸の分析を行いました。移動相および試料は日本薬局方に従い調製しました。

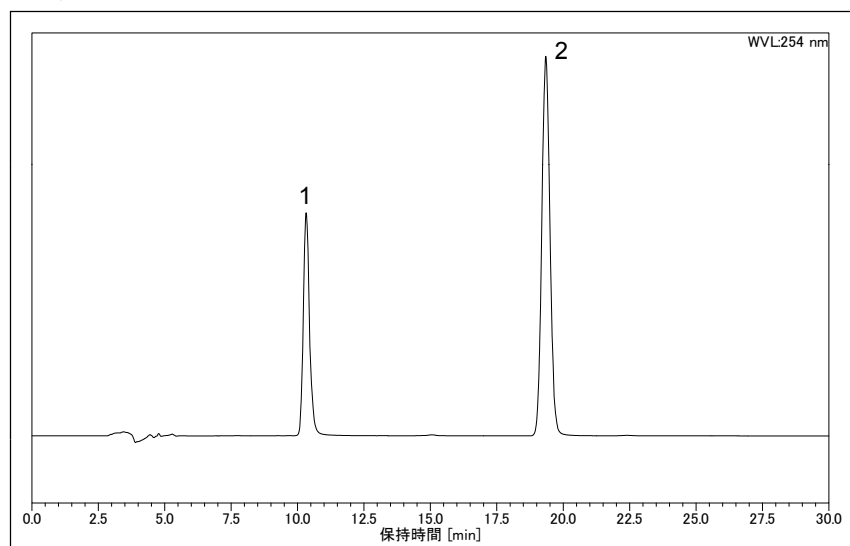


Fig.4 Analysis of Glycyrrhizin

### Conditions;

Column: Develosil ODS-HG-5  
(4.6x250mm)

Mobile phase: Acetonitrile/薄めた酢酸  
=40/60

Flow rate: 0.7ml/min

Temperature: 23°C

Detection: UV254nm(PDA)

Sample: Glycyrrhizin acid  
Propyl p-Hydroxybenzoate

Injection volume: 20uL

System: DIONEX/Ultimate 3000 Series