

L-column3 Application Data Sheet for LC

Application No. L3044

Loxoprofen sodium tablet

Loxoprofen sodium is a popular non-steroidal anti-inflammatory drug used widely in Japan. The 18th edition of the Japanese Pharmacopoeia utilizes HPLC in the determination method of loxoprofen sodium tablets. Upon testing with L-column 3, it has been confirmed that all the requirements mentioned in the system suitability criteria were met

Key words : Loxoprofen sodium , C18, ODS, Non-steroidal anti-inflammatory drugs, NSAIDs, Japanese Pharmacopoeia
 Column : L-column3 C18 (USP category: L1)

[Analytical conditions]

Column : L-column3 C18 (5 μ m, 12 nm); 6.0 mm I.D. \times 150 mm L.; Cat. No. 822090
 Eluent : CH₃OH/H₂O/CH₃COOH/Triethylamine (600/400/1/1 v/v/v/v)
 Flow rate : 0.9 mL/min
 Temperature : 40°C
 Detection : UV 222 nm
 Injection volume : 10 μ L
 System : Agilent 1260

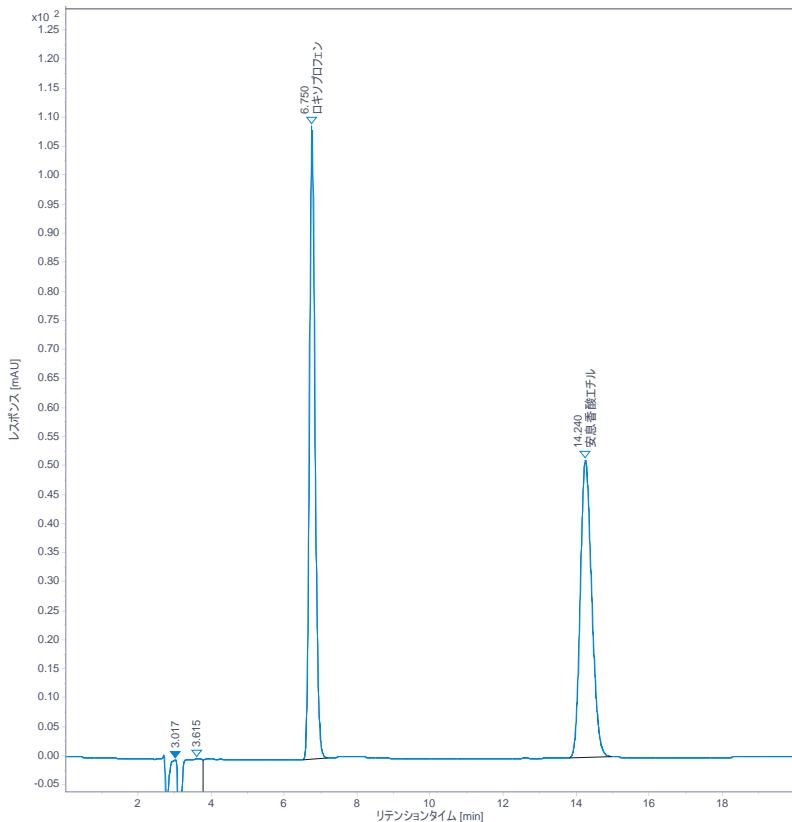
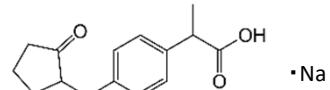


Fig. 1 Chromatogram of standard solution for assay of loxoprofen sodium tablets

Sample:
 1. Loxoprofen sodium (60 mg/L)



2. Ethyl benzoate (150 mg/L)

Sample solvent: CH₃CN/H₂O (6/4)

Results of system suitability test of Loxoprofen

System suitability requirements	Results	Judgement
Resolution (Loxoprofen and Ethyl benzoate)	≥ 10.0	17.7
System suitability	$\geq 1.0\%$	0.1