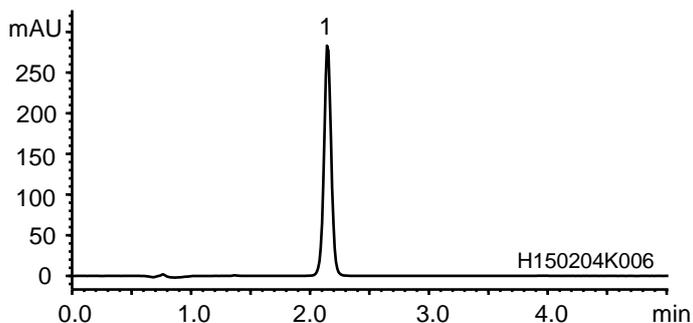


モンテルカストナトリウム錠 (日本薬局方原案記載条件)  
Montelukast sodium tablets (The draft for The Japanese Pharmacopoeia)

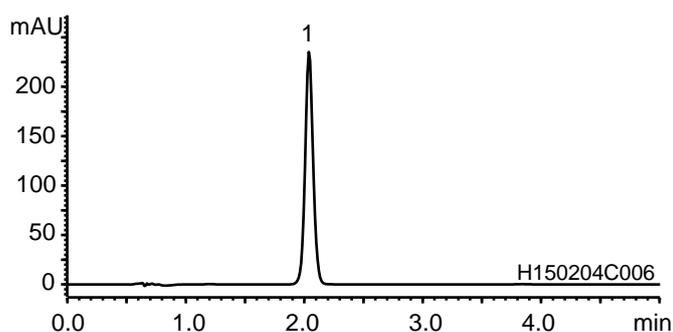
H150501A

(A) Dissolution: Standard solution<sup>1</sup>  
(5.5 µg/mL Montelukast)



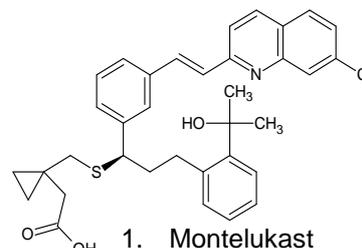
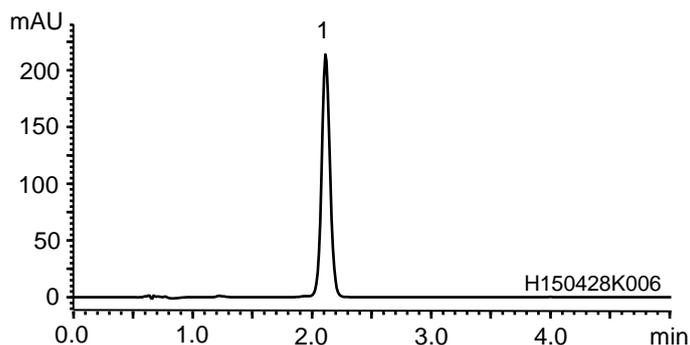
	System suitability requirement	Result
Theoretical plate number (Montelukast)	≥2000	6100
Tailing factor (Montelukast)	≤1.5	1.10
Relative standard deviation of peak area (n=5) (Montelukast)	≤2.0%	0.05%

(B) Uniformity of dosage units: Standard solution<sup>1</sup>  
(0.025 mg/mL Montelukast)



	System suitability requirement	Result
Theoretical plate number (Montelukast)	≥2000	4500
Tailing factor (Montelukast)	≤1.5	1.13
Relative standard deviation of peak area (n=5) (Montelukast)	≤1.0%	0.06%

(C) Uniformity of dosage units: Sample solution<sup>2</sup>  
(0.025 mg/mL Montelukast)



Column : YMC-Pack Ph (5 µm, 12 nm)  
100 X 3.0 mm I.D.  
Eluent : acetonitrile/water/TFA (500/500/2)  
Flow rate : 0.9 mL/min (*adjust the flow rate so that the retention time of montelukast is about 2 min*)  
Temperature : 50°C  
Detection : UV at 389 nm  
Injection : A) 50 µL, B),C) 10 µL

(The draft for The Japanese Pharmacopoeia 17th; Dissolution, Uniformity of dosage units)

<sup>1</sup> All standard solutions were prepared from Montelukast sodium salt hydrate supplied as a reagent for laboratory use.

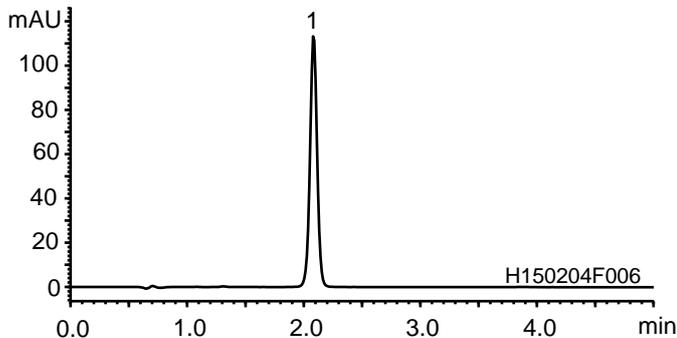
<sup>2</sup> Sample solution was prepared from Montelukast sodium tablets.

モンテルカストナトリウム錠 (米国薬局方原案記載条件)

Montelukast sodium tablets (The draft for The United States Pharmacopoeia)

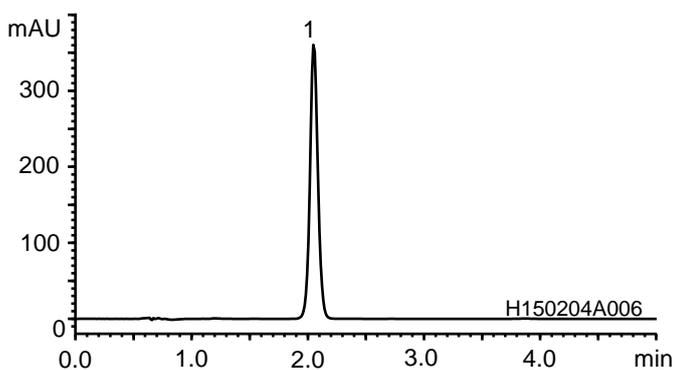
H150501B

(A) Dissolution: Standard solution<sup>\*1</sup>  
(5.4 µg/mL Montelukast)



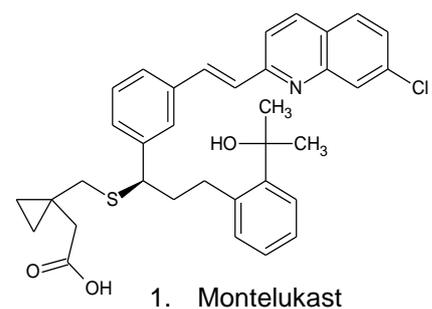
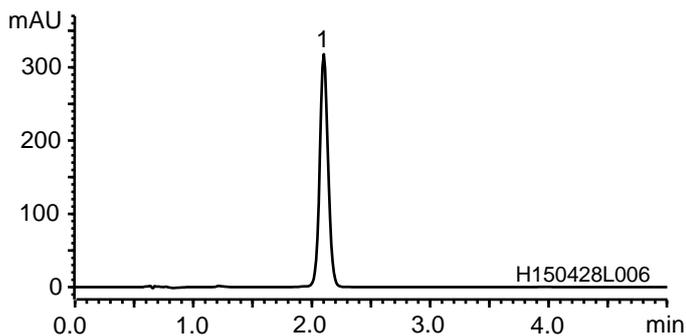
	System suitability requirement	Result
Tailing factor (Montelukast)	≤ 1.5	1.08
Relative standard deviation of peak area (n=5) (Montelukast)	≤ 2.0%	0.05%

(B) Uniformity of dosage units: Standard solution<sup>\*1</sup>  
(0.039 mg/mL Montelukast)



	System suitability requirement	Result
Tailing factor (Montelukast)	≤ 1.5	1.15
Relative standard deviation of peak area (n=5) (Montelukast)	≤ 2.0%	0.06%

(C) Uniformity of dosage units: Sample solution<sup>\*2</sup>  
(0.04 mg/mL Montelukast)



Column : YMC-Pack Ph (5 µm, 12 nm)  
100 X 3.0 mm I.D.  
Eluent : acetonitrile/water/TFA (500/500/2)  
Flow rate : 0.9 mL/min  
Temperature : 50°C  
Detection : UV at 389 nm  
Injection : A) 20 µL, B), C) 10 µL

(The draft for The United States Pharmacopoeia 40th; Dissolution, Uniformity of dosage units)

<sup>\*1</sup> All Standard solutions were prepared from Montelukast sodium salt hydrate supplied as a reagent for laboratory use.

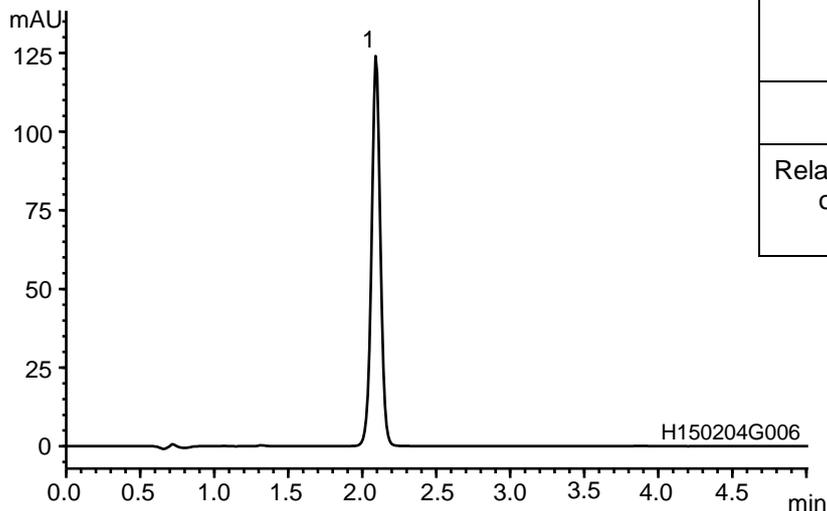
<sup>\*2</sup> Sample solution was prepared from Montelukast sodium tablets.

モンテルカストナトリウム顆粒 (米国薬局方原案記載条件)

Montelukast sodium oral granules (The draft for The United States Pharmacopoeia)

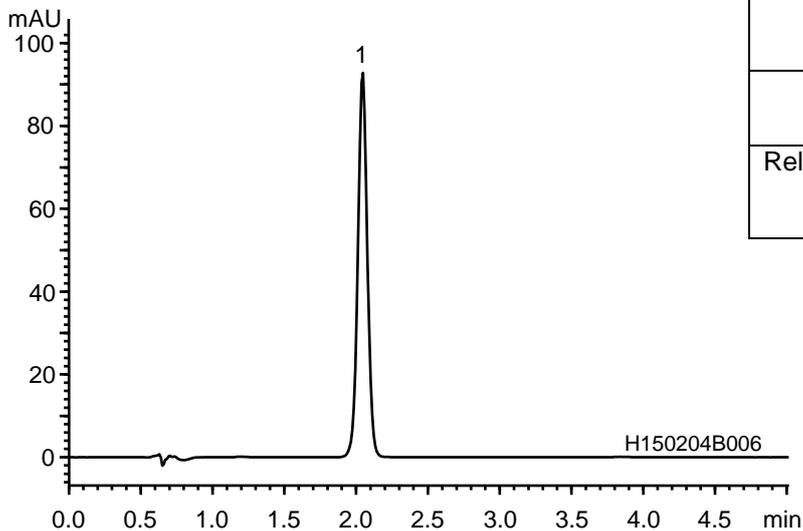
H150501C

(A) Dissolution: Standard solution  
(4.4 µg/mL Montelukast)

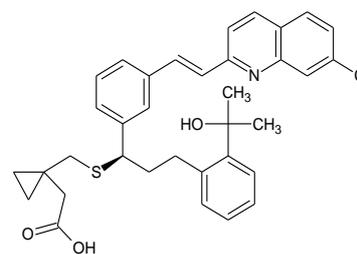


	System suitability requirement	Result
Tailing factor (Montelukast)	≤ 1.5	1.08
Relative standard deviation of peak area (n=5) (Montelukast)	≤ 2.0%	0.12%

(B) Uniformity of dosage units: Standard solution  
(0.020 mg/mL Montelukast)



	System suitability requirement	Result
Tailing factor (Montelukast)	≤ 1.5	1.09
Relative standard deviation of peak area (n=5) (Montelukast)	≤ 2.0%	0.15%



1. Montelukast

Column : YMC-Pack Ph (5 µm, 12 nm)  
100 X 3.0 mmI.D.  
Eluent : acetonitrile/water/TFA (500/500/2)  
Flow rate : 0.9 mL/min  
Temperature : 50°C  
Detection : UV at 389 nm  
Injection : A) 25 µL, B) 5 µL

(The draft for The United States Pharmacopoeia 40th; Dissolution, Uniformity of dosage units)

\*All Standard solutions were prepared from Montelukast sodium salt hydrate supplied as a reagent for laboratory use.