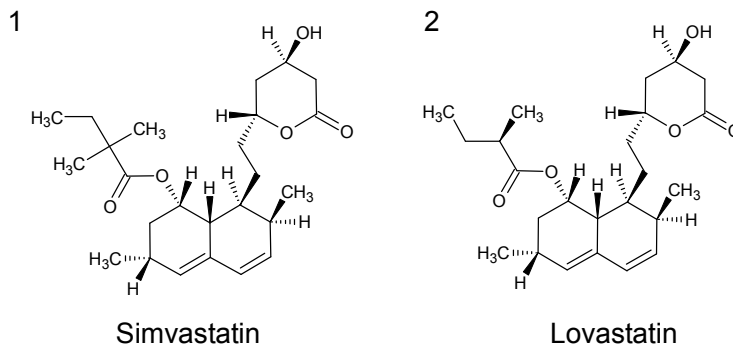
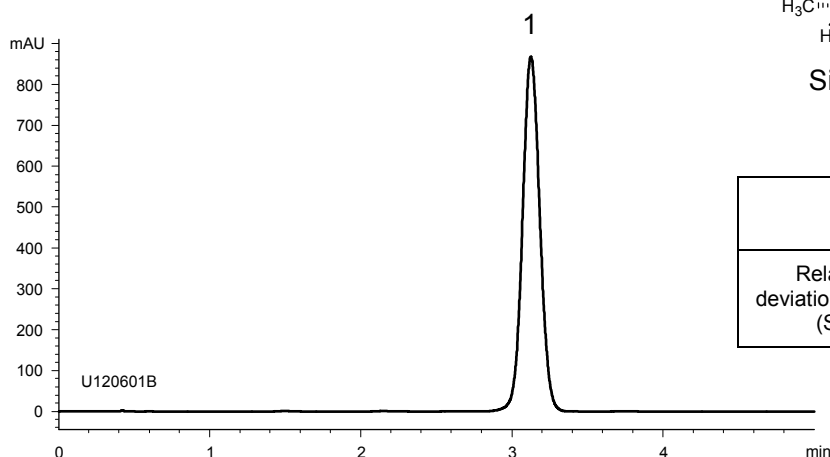


シンバスタチン（日本薬局方記載条件）
Simvastatin (The Japanese Pharmacopoeia)

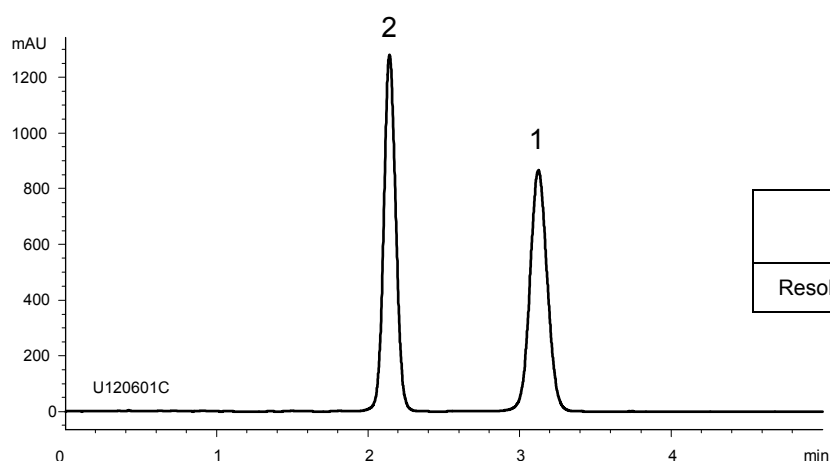
U120619B

A) Standard solution*
(1.5 mg/mL Simvastatin)



	System suitability requirement	Result
Relative standard deviation of the peak area (Simvastatin)	≤ 1.0%	0.44%

B) System suitability solution*
(1.5 mg/mL Lovastatin, 1.5 mg/mL Simvastatin)



	System suitability requirement	Result
Resolution (1, 2)	≥ 3	5.6

Column : YMC-Triart C18 (3 μm, 12 nm)
35 X 4.6 mm I.D.

Eluent : acetonitrile/water/phosphoric acid (50/50/0.05)

Flow rate : 3.0 mL/min (*adjust the flow rate so that the retention time of simvastatin is about 3 min*)

Temperature : 25°C

Detection : UV at 238 nm

Injection : 5 μL

(The Japanese Pharmacopoeia 16th; Assay)

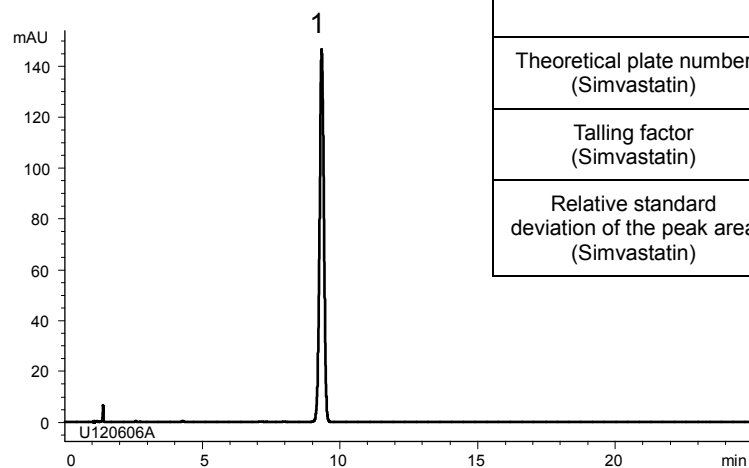
* All solutions were prepared from Simvastatin supplied as a reagent for laboratory use.

シンバスタチン錠 (日本薬局方収載原案記載条件)

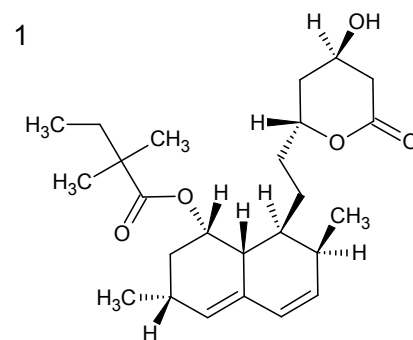
Simvastatin tablets (The draft for the Japanese Pharmacopoeia)

U120608C

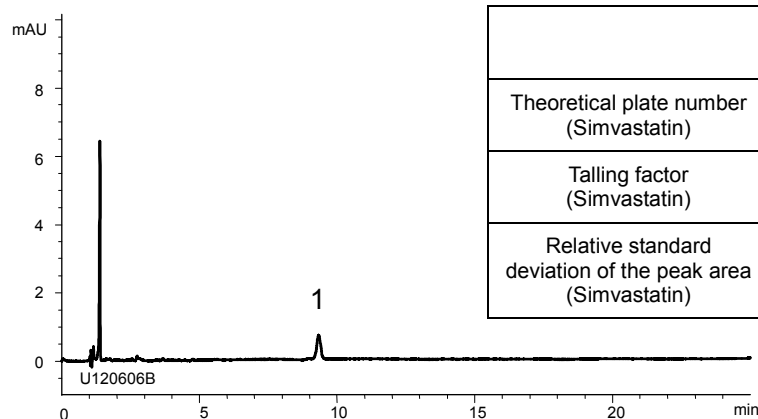
A) Assay: Standard solution*¹
(0.1 mg/mL Simvastatin)



	System suitability requirement	Result
Theoretical plate number (Simvastatin)	≥ 6000	17600
Tailing factor (Simvastatin)	$0.9 \leq Tf \leq 1.1$	0.98
Relative standard deviation of the peak area (Simvastatin)	$\leq 1.0\%$	0.07%



B) Related substances: Standard solution*¹
(0.0005 mg/mL Simvastatin)



	System suitability requirement	Result
Theoretical plate number (Simvastatin)	≥ 6000	17200
Tailing factor (Simvastatin)	$0.9 \leq Tf \leq 1.1$	1.00
Relative standard deviation of the peak area (Simvastatin)	$\leq 2.0\%$	1.05%

Simvastatin

Column : YMC-Triart C18 (5 μ m, 12 nm)
250 X 4.6 mm I.D.

Eluent : phosphate buffer (pH 4.5)*²/acetonitrile (35/65)
*² Dissolve 3.90 g of NaH₂PO₄ · 2H₂O in 900 mL water, adjust pH 4.5 with H₃PO₄, and add water to make 1000 mL

Flow rate : 1.8 mL/min (adjust the flow rate so that the retention time of simvastatin is about 9 min)

Temperature : 45°C

Detection : UV at 238 nm

Injection : 10 μ L

(The draft for the Japanese Pharmacopoeia; Assay, Related substances)

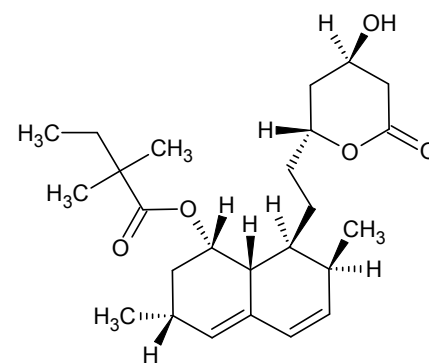
*¹ All standard solutions were prepared from Simvastatin supplied as a reagent for laboratory use.

シンバスタチン錠 (日本薬局方収載原案記載条件)

Simvastatin tablets (The draft for the Japanese Pharmacopoeia)

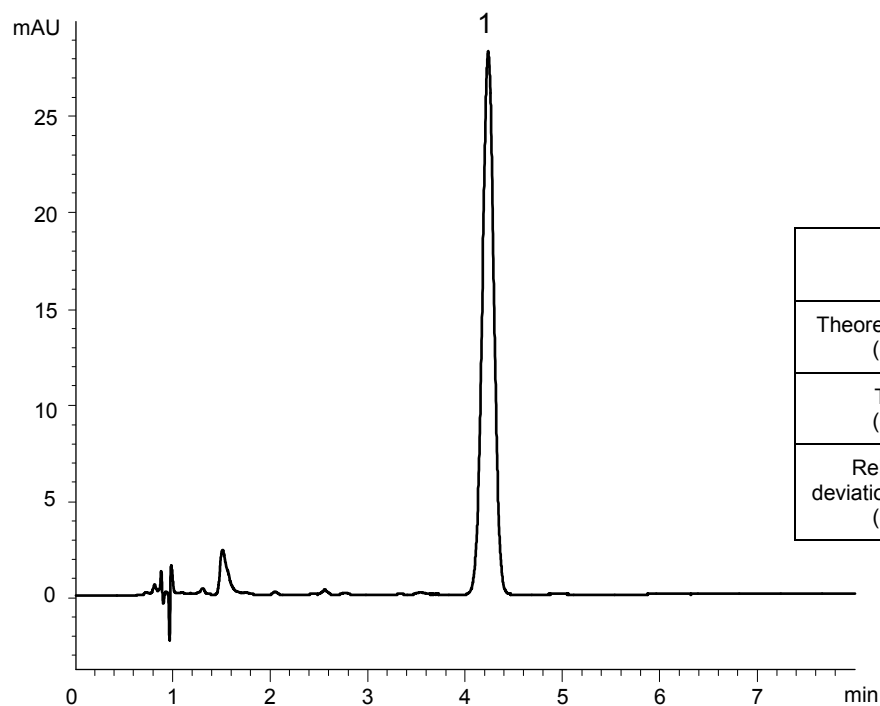
U120608B

1



Simvastatin

Standard solution*
(0.0055 mg/mL Simvastatin)



	System suitability requirement	Result
Theoretical plate number (Simvastatin)	≥ 3000	6000
Tailing factor (Simvastatin)	≤ 2.0	0.99
Relative standard deviation of the peak area (Simvastatin)	$\leq 1.0\%$	0.05%

Column : YMC-Triart C18 (5 μ m, 12 nm)
150 X 4.0 mm I.D.
Eluent : methanol/0.02 M KH_2PO_4 (4/1)
Flow rate : 1.3 mL/min (*adjust the flow rate so that the retention time of simvastatin is about 4 min*)
Temperature : 50°C
Detection : UV at 238 nm
Injection : 20 μ L

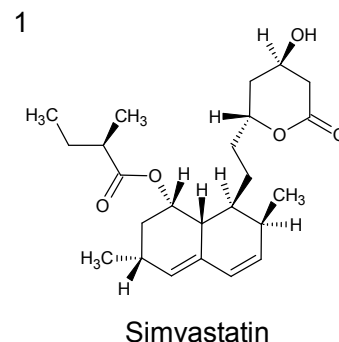
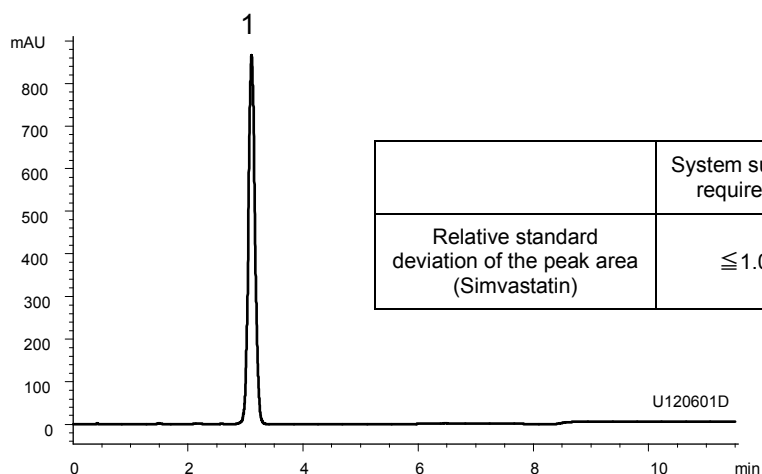
(The draft for the Japanese Pharmacopoeia; Dissolution)

* Standard solution was prepared from Simvastatin supplied as a reagent for laboratory use.

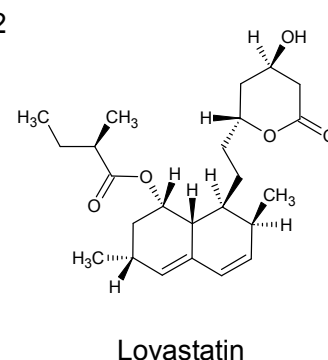
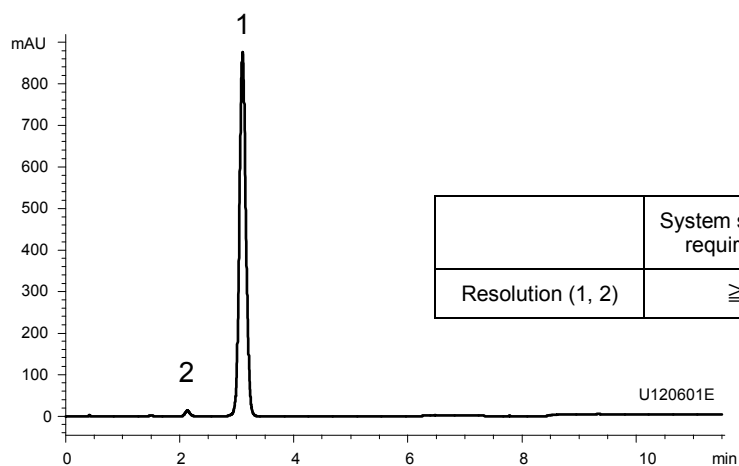
シンバスタチン（米国薬局方記載条件）
Simvastatin (The United States pharmacopeia)

U120622A

A) Standard preparation*
(1.5 mg/mL Simvastatin)



B) System suitability preparation*
(0.015 mg/mL Lovastatin, 1.5 mg/mL Simvastatin)



Column : YMC-Triart C18 (3 μ m, 12 nm)
35 X 4.6 mm I.D.

Eluent : A) acetonitrile/water/phosphoric acid (50/50/0.05)
B) acetonitrile/phosphoric acid (100/0.1)
0%B(0-4.5 min), 0-5%B(4.5-4.6 min), 5-75%B(4.6-8.0 min), 75%B(8.0-11.5 min)

Flow rate : 3.0 mL/min

Temperature : 25°C

Detection : UV at 238 nm

Injection : 5 μ L

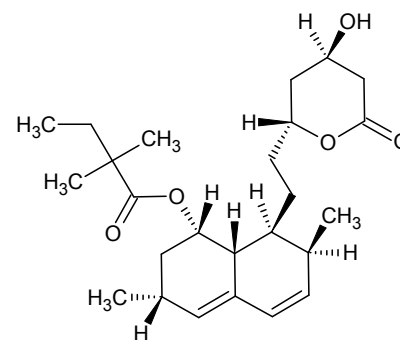
(The United States Pharmacopeia 34th; Assay)

* All preparations were prepared from Simvastatin supplied as a reagent for laboratory use.

シンバスタチン錠 (米国薬局方記載条件)
Simvastatin tablets (The United States Pharmacopeia)

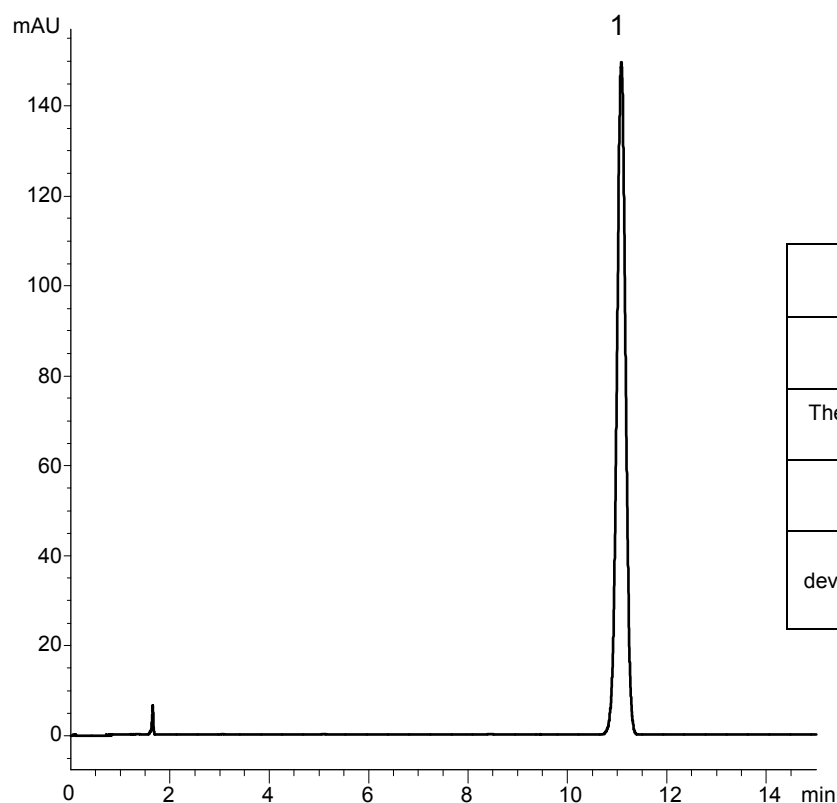
U120605E

1



Simvastatin

Standard preparation*¹
(0.1 mg/mL Simvastatin)



	System suitability requirement	Result
Capacity factor (Simvastatin)	≥ 3.0	5.69
Theoretical plate number (Simvastatin)	≥ 4500	19200
Tailing factor (Simvastatin)	≤ 2.0	0.98
Relative standard deviation of the peak area (Simvastatin)	≤ 2.0%	0.12%

Column : YMC-Triart C18 (5 μm, 12 nm)
250 X 4.6 mm I.D.

Eluent : phosphate buffer (pH 4.5)*²/acetonitrile (35/65)
*² Dissolve 3.90 g of NaH₂PO₄ · 2H₂O in 900 mL water, adjust pH 4.5 with H₃PO₄, and add water to make 1000 mL

Flow rate : 1.5 mL/min

Temperature : 45°C

Detection : UV at 238 nm

Injection : 10 μL

(The United States Pharmacopeia 34th; Assay)

*¹ Standard preparation was prepared from Simvastatin supplied as a reagent for laboratory use.