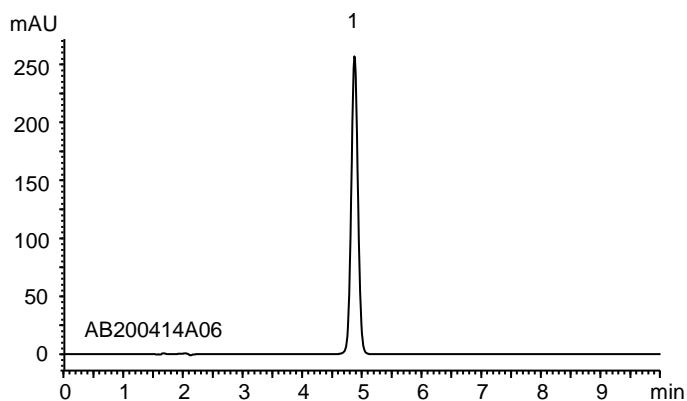


エソメプラゾールマグネシウム (米国薬局方記載条件)
Esomeprazole Magnesium (The United States Pharmacopeia)

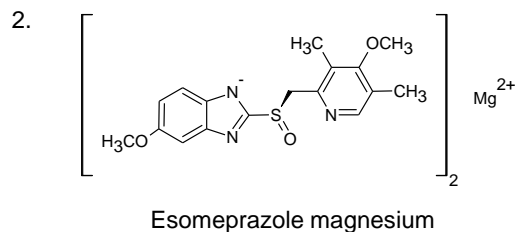
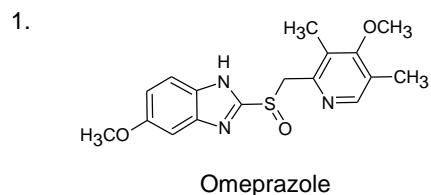
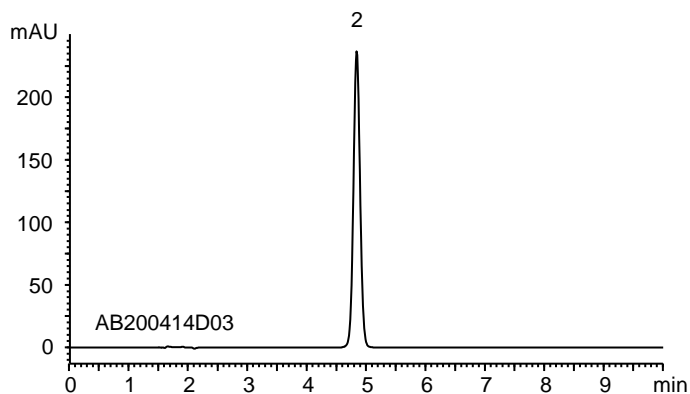
AB200829A

(A) Standard solution*1
(0.05 mg/mL Omeprazole)



	System suitability requirement	Result
Theoretical plate number (Omeprazole)	≥ 2000	9400
Relative standard deviation of the peak area (n=6) (Omeprazole)	$\leq 2.0\%$	0.36%

(B) Sample solution*1
(0.05 mg/mL Esomeprazole magnesium)



Column : YMC-Triart C8 (5 μ m, 12 nm)
150 X 4.6 mm I.D.

Eluent : phosphate buffer (pH 7.6)*2/acetonitrile (13/7)

*2 Dissolve 4.472 g of $\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O}$ and 0.725 g of NaH_2PO_4 in 1000 mL water, dilute 250 mL of this solution with water to 1000 mL and adjust pH 7.6 with H_3PO_4

Flow rate : 1.0 mL/min

Temperature : 25°C

Detection : UV at 280 nm

Injection : 20 μ L

(The United States Pharmacopeia 42nd; ASSAY)

*1 All standard and sample solutions were prepared from Omeprazole and Esomeprazole magnesium supplied as a reagent for laboratory use.

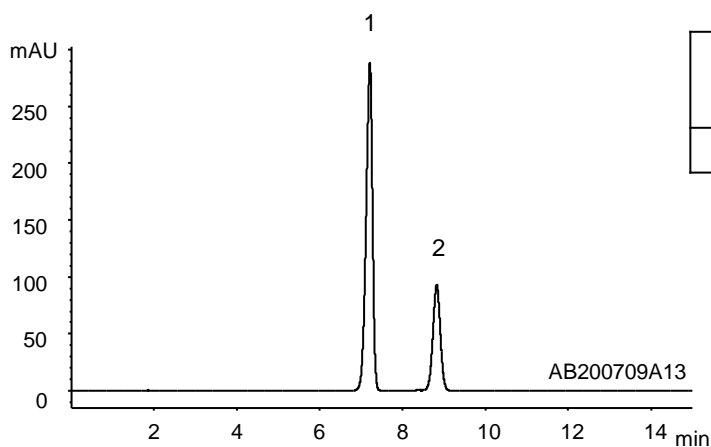
エソメプラゾールマグネシウム (米国薬局方記載条件)

Esomeprazole Magnesium (The United States Pharmacopeia)

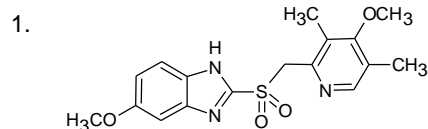
AB200830A

(A) System suitability solution*1

(0.04 mg/mL Omeprazole related compound A, 0.04 mg/mL Omeprazole)



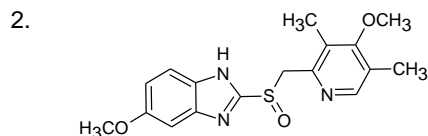
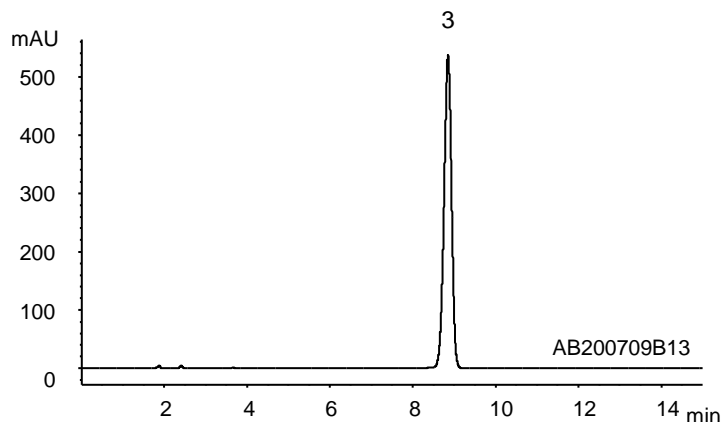
	System suitability requirement	Result
Resolution (1, 2)	≥3.0	5.4



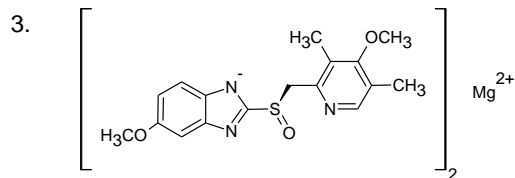
Omeprazole related compound A
(Omeprazole sulfone)

(B) Sample solution*1

(0.16 mg/mL Esomeprazole magnesium)



Omeprazole



Esomeprazole magnesium

Column : YMC-Triart C8 (5 μm, 12 nm)
150 X 4.6 mmI.D.

Eluent : phosphate buffer (pH 7.6)*2/acetonitrile (29/11)

*2Dissolve 4.472 g of Na₂HPO₄·2H₂O and 0.725 g of NaH₂PO₄ in 1000 mL water, dilute 250 mL of this solution with water to 1000 mL and adjust pH 7.6 with H₃PO₄

Flow rate : 1.0 mL/min

Temperature : 45°C

Detection : UV at 280 nm

Injection : 50 μL

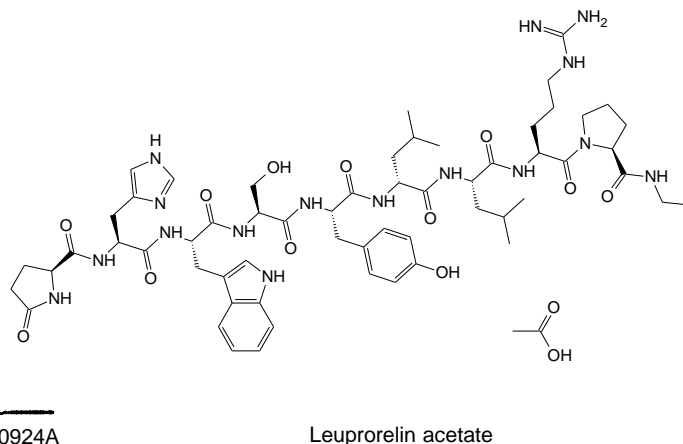
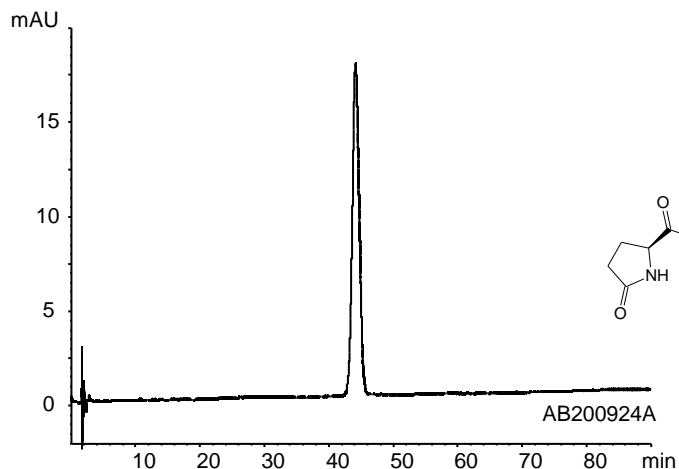
(The United States Pharmacopeia 42nd; ORGANIC IMPURITIES)

*1All system suitability and sample solutions were prepared from Omeprazole related compound A, Omeprazole and Esomeprazole magnesium supplied as a reagent for laboratory use.

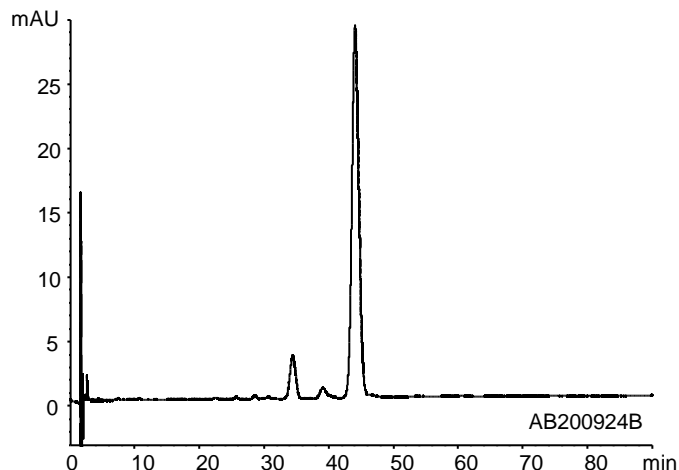
リュープロレリン酢酸塩
Leuprorelin acetate (Leuprolide acetate)

AB200926A

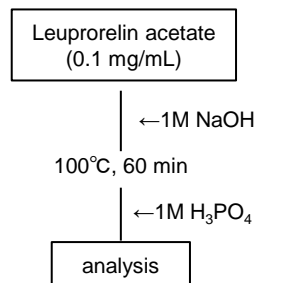
(A) Leuprorelin acetate (0.05 mg/mL)



(B) Leuprolide acetate alkali degradation



Method of alkali degradation



Column : YMC-Triart Bio C18 (3 μm, 30 nm)
100 X 4.6 mm I.D.

Eluent : buffer (pH 3.0)* / acetonitrile / 1-propanol (85/9/6)
*Dissolve 15.2 g of triethylamine in 800 mL of water and adjust pH 3.0 with H₃PO₄, and add water to make 1000 mL.

Flow rate : 0.75 mL/min

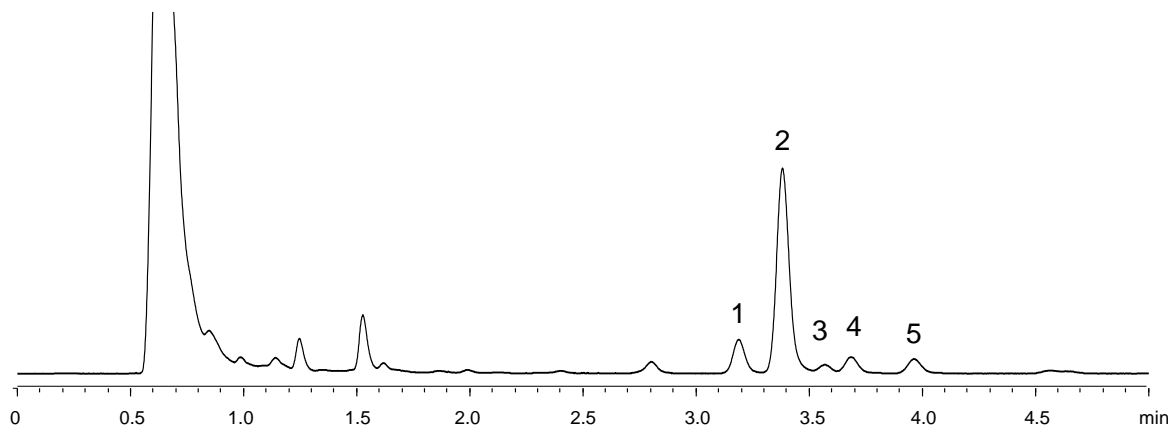
Temperature : 25°C

Detection : UV at 220 nm

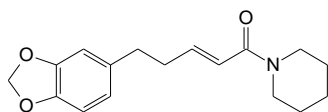
Injection : 20 μL

ヒハツ(ロングペッパー)抽出物中のピペリン類
Piperine and the derivatives in long pepper extract

U201005A

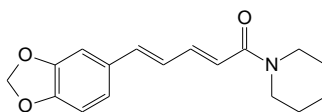


1.



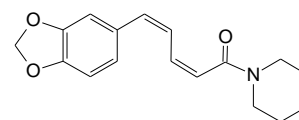
Piperanine

2.



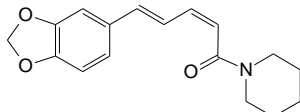
Piperine

3.



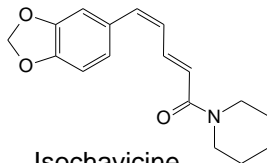
Chavicine

4.



Isopiperine

5.



Isochavicine

Courtesy of T. Mizumoto, MARUZEN PHARMACEUTICALS CO., LTD.

Column : Meteoric Core C18 (2.7 μ m, 8 nm)
100 X 4.6 mm I.D.
Eluent : A) acetonitrile/water/formic acid (450/550/1)
B) acetonitrile
0%B (0-5 min), 100%B (5.01-15 min), 0%B (15.01-25 min)
Flow rate : 1.4 mL/min
Temperature : 35°C
Detection : UV at 270 nm
Injection : 20 μ L
Sample : Long pepper extract powder

Reference:

T. Mizumoto, F. Nakano, Y. Nishizaki, N. Masumoto, N. Sugimoto,
Quantitative Analysis of Piperine and the Derivatives in Long Pepper Extract by HPLC Using Relative Molar Sensitivity,
Food Hygiene and Safety Science 60 (5) : 134-143 (2019)