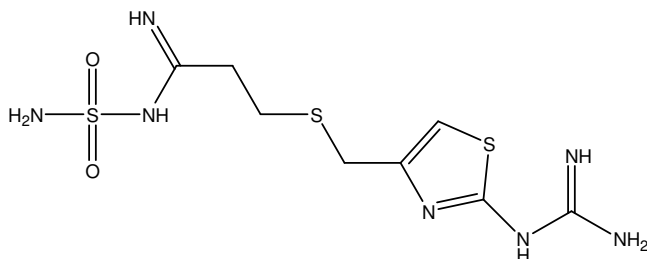


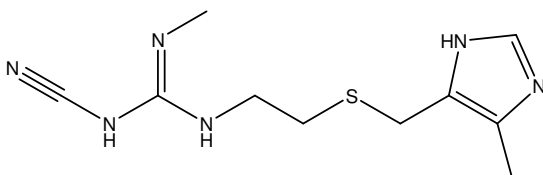
抗潰瘍剤 (H₂ブロッカー)

H₂ blockers

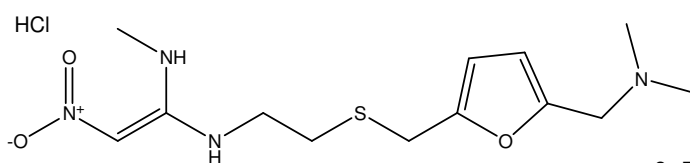
H₂ ブロッカーは胃粘膜性防壁に存在するヒスタミン H₂ 受容体へのヒスタミンの結合を阻害して、胃酸の分泌を抑制します。ここでは、CAPCELL PAK ADME-HR S5 (4.6 mm i.d. x 150 mm) 及び他社 ODS カラムを用いたファモチジン、シメチジン、ラニチジン、ニザチジン、ロキサチジン及びラフチジンの分析例を示します。



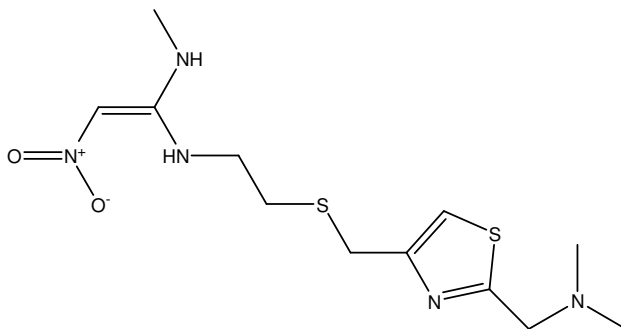
1. ファモチジン (150 µg/mL)
Famotidine (M.W. 337.5)



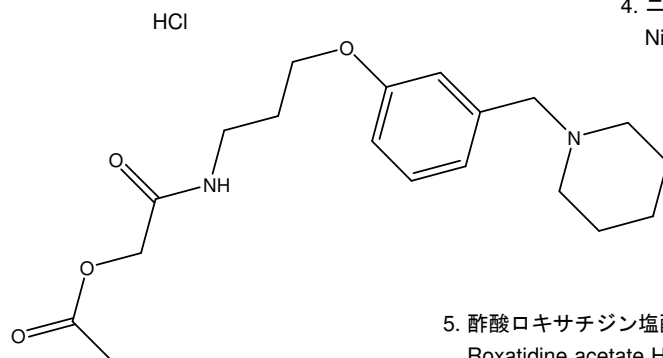
2. シメチジン (150 µg/mL)
Cimetidine (M.W. 252.3)



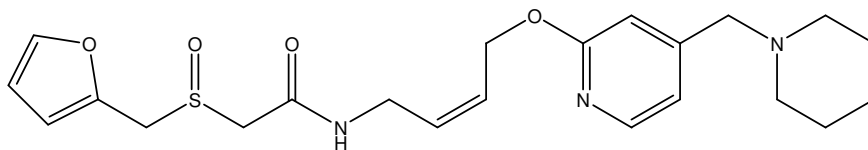
3. ラニチジン塩酸塩 (150 µg/mL)
Ranitidine Hydrochloride (M.W. 350.9)



4. ニザチジン (150 µg/mL)
Nizatidine (M.W. 331.5)

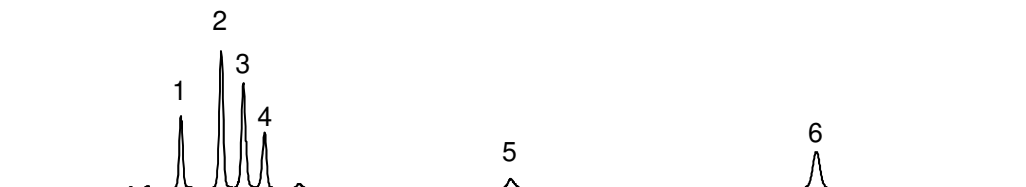


5. 酢酸ロキサチジン塩酸塩 (150 µg/mL)
Roxatidine acetate Hydrochloride (M.W. 384.9)



6. ラフチジン (150 µg/mL)
Lafutidine (M.W. 431.6)

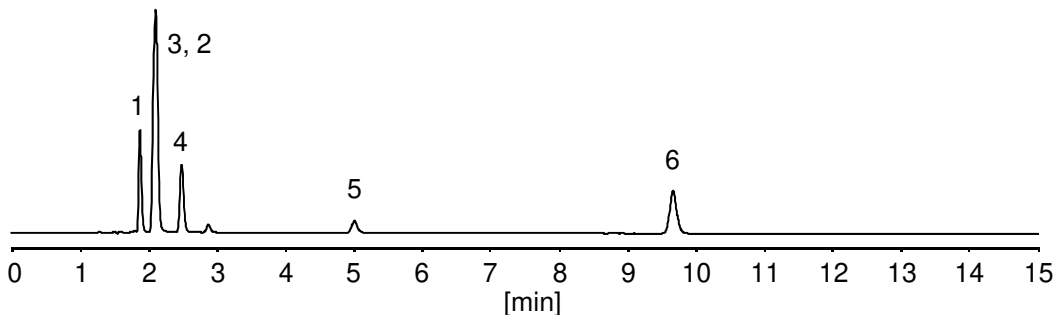
CAPCELL PAK ADME-HR



他社ハイブリッドODSカラム



他社ODSカラム



【HPLC Conditions】

- Column size : S5 ; 4.6 mm i.d. x 150 mm
- Mobile phase : A) 25 mmol/L Phosphate buffer (K_2HPO_4 : KH_2PO_4 = 1 : 1 in molar ratio)
B) CH_3CN
B 25 % (0 min) -> 55 % (15 min) -> 25 % (15.1 min) Gradient
- Flow rate : 1 mL/min
- Temperature : 40 °C
- Detection : UV 230 nm
- Inj. vol. : 2 µL
- Sample dissolved in : Famotidine was dissolved in 10 vol% ethanol at 1 mg/mL. Cimetidine, Ranitidine Hydrochloride, Nizatidine and Roxatidine acetate Hydrochloride were separately dissolved in H_2O at 1mg/mL. Lafutidine was dissolved in methanol at 1mg/mL. 150 µL of each solution was mixed together. The mixture was diluted to 1mL by adding H_2O .
- ※ 1 µg/mL = 1 ppm