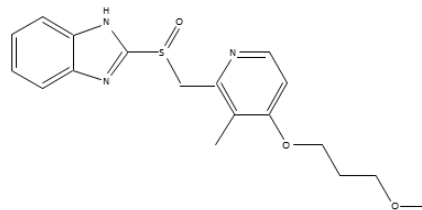


Rabeprazole is a type of proton pump inhibitors. It reduces gastric acid production and is used as an antiulcer drug.

In general, basic functional groups often cause peak tailing in HPLC analysis. However, good peak shape was obtained by using InertSustain C18 because of its inertness although rabeprazole has several basic groups.

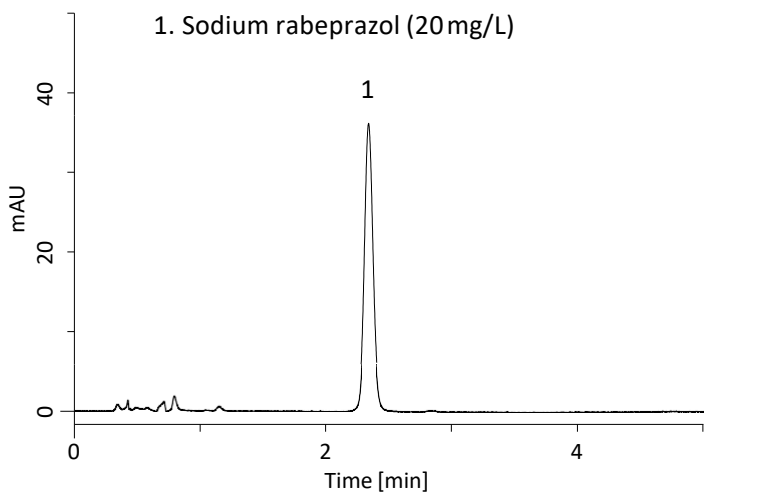
Chemical Structure



Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

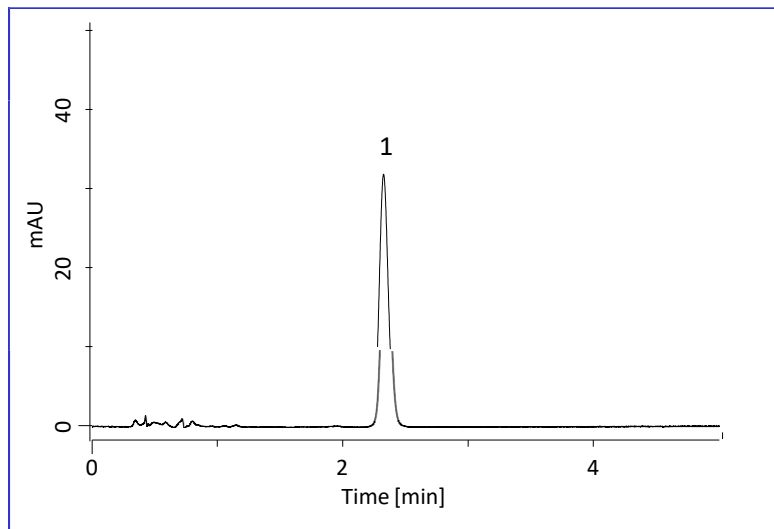
Standard Solution

1. Sodium rabeprazol (20 mg/L)



Tablet Sample

The sample concentration was adjusted to 20 mg/L as rabeprazole sodium.



Conditions

Column : InertSustain C18 HP
(3 μm, 50 x 4.6 mm I.D.)

Column Cat. No. : 5020-14442

Eluent : A) CH₃CN
B) Buffer*
A/B = 32/68, v/v

Flow rate : 1.0 mL/min

Column temp. : 30 °C

Detection : UV 280 nm

Injection vol. : 9 μL

* Buffer: Sodium dihydrogenphosphate (0.725 mg) and di-sodium hydrogen phosphate (4.472 g) was dissolved in 300 mL of purified water. The solution was made up to 1000 mL with purified water. After 4-fold dilution of this solution with purified water, its pH value was adjusted to 7.6 by adding phosphoric acid.

An example of pretreatment method for tablet sample

Sample

- Grind tablet into powder
- Weigh the powder equivalent to 20 mg of rabeprazole sodium.

Extraction

- Add 80 mL of diluent** Sonication extraction for 5 min
- Make up to 100 mL with diluent

Filtration

- 0.45 μm membrane filter

Dilution

- 10-fold dilution with diluent

HPLC

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