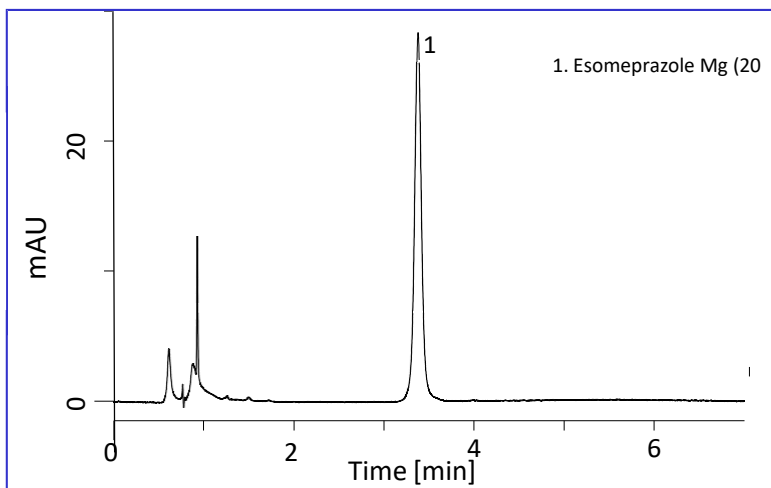


Esomeprazole, which is a type of proton pump inhibitors, prevents secretion of gastric acid. It is used for the treatment of gastric ulcers, duodenal ulcers, and eradication of *Helicobacter pylori*.

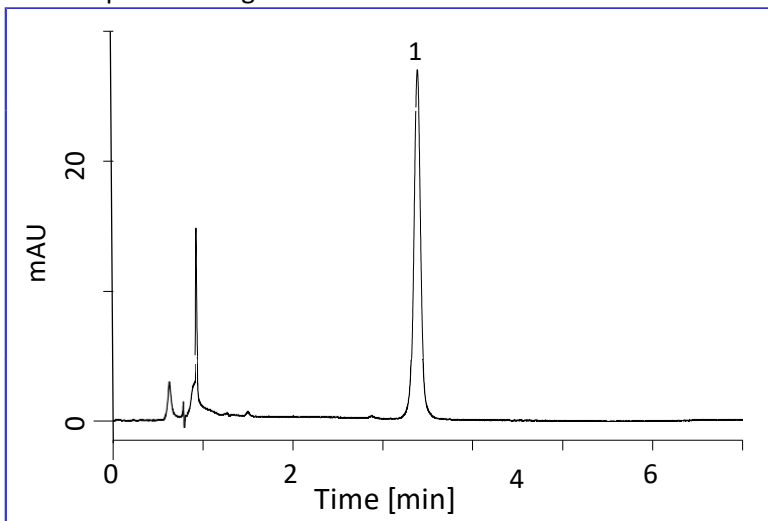
In this note, chromatograms of esomeprazole based on the condition described in the United States Pharmacopeia (USP) are shown. By using InertSustain C18, not only rapid analysis can be carried out but also symmetric peak was obtained.

Standard Solution

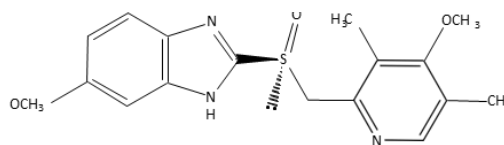


Tablet Sample

The sample concentration was adjusted to 20 mg/L as esomeprazole magnesium.



Chemical Structure



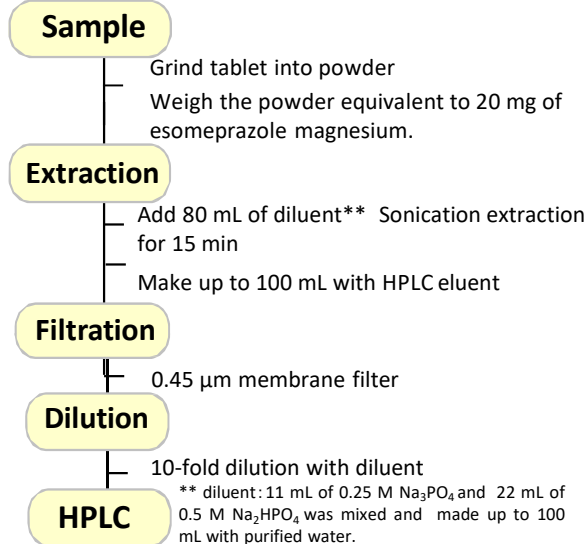
Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

Conditions

Column	: InertSustain C18 HP (3 μ m, 50 x 4.6 mm I.D.)
Column Cat. No. :	5020-14442
Eluent	: A) CH ₃ CN B) Buffer* A/B = 35/65, v/v
Flow rate	: 1.0 mL/min
Column temp.	: 30 °C
Detection	: UV 280 nm
Injection Vol.	: 9 μ L

* Buffer: Sodium dihydrogenphosphate (0.725 g) 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



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