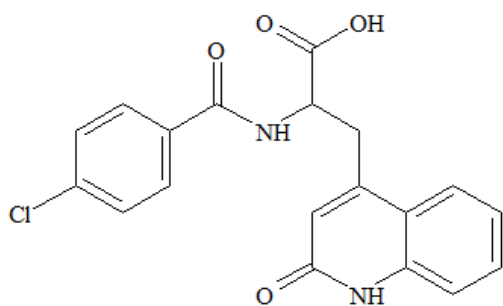


# Analysis of Rebamipide, Used for Treatment of Gastritis and Gastric Ulcers

Rebamipide inhibits the secretion of stomach acids and increases mucus production, it used to relieve stomach ulcers and acute gastritis. This application note presents a method for extracting rebamipide from serum using InertSepPharma solid-phase -, and measurement using LC-MS/MS.

## 1. Flow diagram of solid phase pretreatment

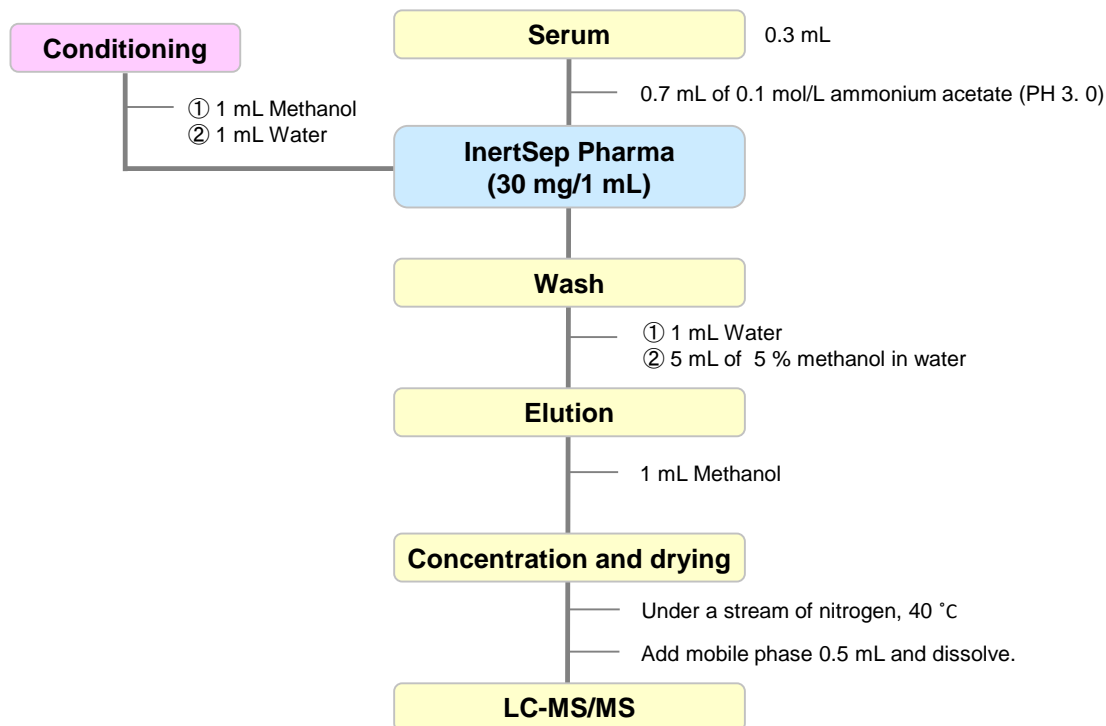
[Structure of rebamipide]



Rebamipide

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

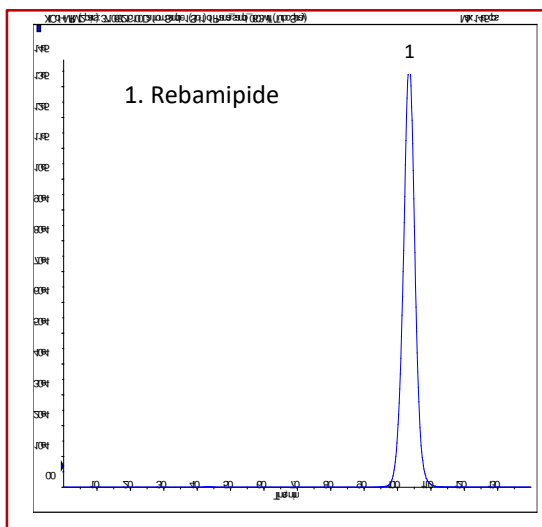
[Example of pretreatment of rebamipide]



NOTE) This is a method developed by GL Sciences based on literature information.

## 2. Measurement conditions

### Example: measurement of standard



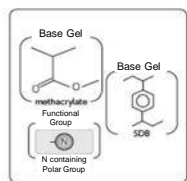
### HPLC conditions

<b>Column</b>	: InertSustain C18 (5 $\mu$ m, 150 x 2.1 mm I.D.)
<b>Eluent</b>	: A) $\text{CH}_3\text{CN}$ : B) 10 mM $\text{HCOONH}_4$ in $\text{H}_2\text{O}$  A/B = 20/80, v/v
<b>Flow rate</b>	: 0.2 mL/min
<b>Column Temperature</b>	: 40 $^\circ\text{C}$
<b>Detection</b>	: LC-MS/MS  (API 4000 : ESI, Positive, MRM)
<b>Injection Volume</b>	: 10 $\mu\text{L}$
<b>Sample</b>	: Rebamipide Q1/Q3 = 371/216

## 3. Measurement-related products

### Solid-phase extraction column

#### [InertSep Pharma]



Mean particle size	: 30 $\mu\text{m}$
Surface Area	: 600 $\text{m}^2/\text{g}$
Pore volume	: 1.1 mL/g
Pore size	: 70 $\text{\AA}$
PH range of use	: 1 - 14

InertSep Pharma is a complex polymer solid phase of N-containing methacrylate and styrene divinylbenzene. This is a reversed-phase polymer solid phase dedicated to pharmaceutical analysis developed for simultaneous screening of pharmaceutical compounds in biological samples.

Product name	Column size	Qty.	Cat.No.
InertSep Pharma	30 mg/1 mL	100 bottles	5010-27100

### HPLC column

#### [InertSustain C18]



Base Material	: High purity spherical silica gel (ES silica)
Surface Area	: 350 $\text{m}^2/\text{g}$
Pore size	: 100 $\text{\AA}$
Pore volume	: 0.85 mL/g
End-capping	: Yes
Carbon Loading	: 14 %
USP Code	: L1
pH Range	: 1 - 10

InertSustain C18 is an ODS column that can be used with 100% aqueous eluents. It was developed by pursuing inertness and chemical stability using GL Sciences' proprietary synthetic technology.

Product name	Particle size	Inside diameter	Length	Cat.No.
InertSustain C18	5 $\mu\text{m}$	2.1 mm	150 mm	5020-07315

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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