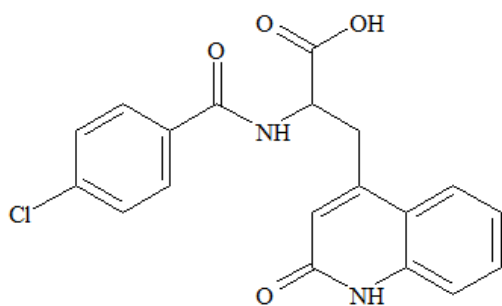


Analysis of Rebamipide, Used for Treatment of Gastritis and Gastric Ulcers

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 InertSepPhama solid-phase -, and measurement using LC-MS/MS.

1. Flow diagram of solid phase pretreatment

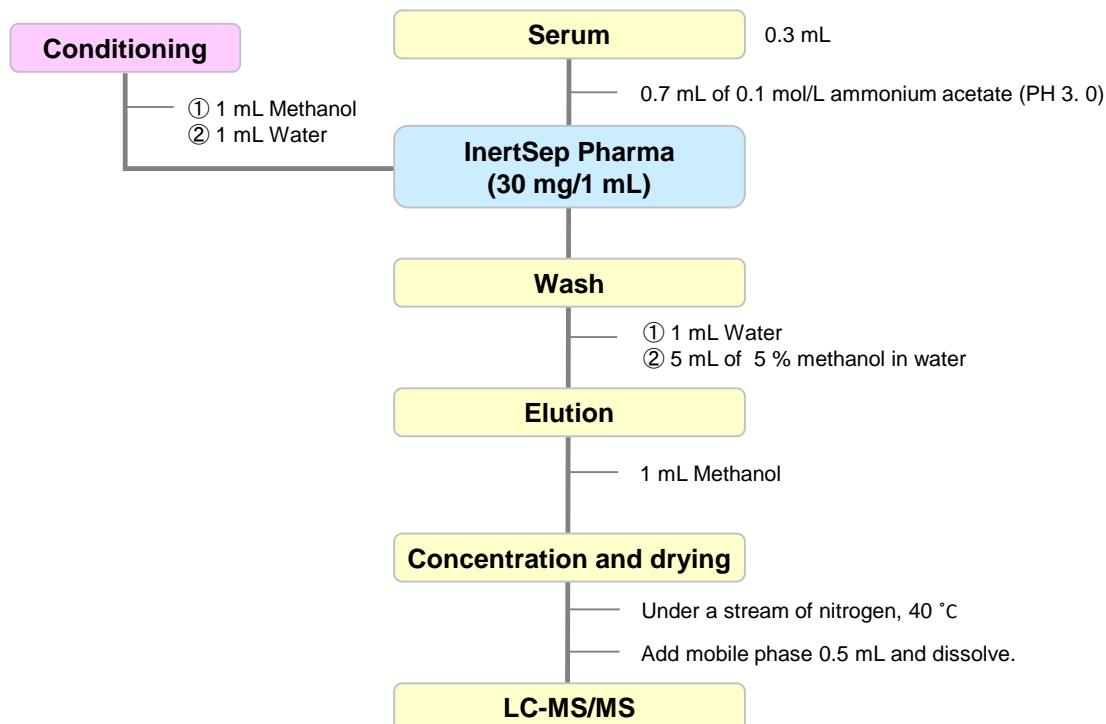
[Structure of rebamipide]



Rebamipide

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

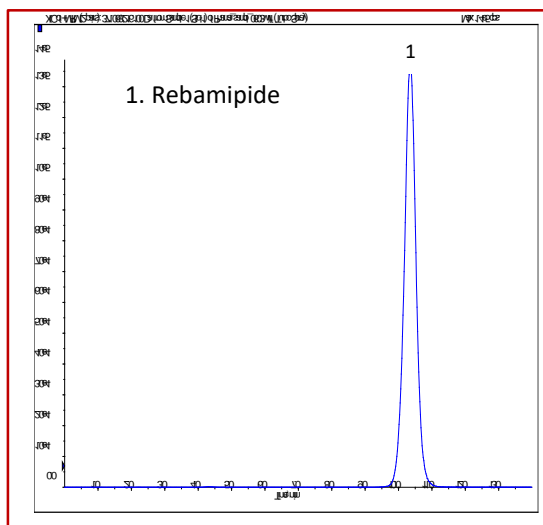
[Example of pretreatment of rebamipide]



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

2. Measurement conditions

Example: measurement of standard



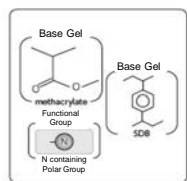
HPLC conditions

Column	: InertSustain C18 (5 μ m, 150 x 2.1 mm I.D.)
Eluent	: A) CH ₃ CN : B) 10 mM HCOONH ₄ in H ₂ O A/B = 20/80, v/v
Flow rate	: 0.2 mL/min
Column Temperature	: 40 °C
Detection	: LC-MS/MS (API 4000 : ESI, Positive, MRM)
Injection Volume	: 10 μ L
Sample	: Rebamipide Q1/Q3 = 371/216

3. Measurement-related products

Solid-phase extraction column

[InertSep Pharma]



Mean particle size	: 30 μ m
Surface Area	: 600 m ² /g
Pore volume	: 1.1 mL/g
Pore size	: 70 Å
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 m ² /g
Pore size	: 100 Å
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 μ 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.

GL Sciences, Inc. Japan

22-1 Nishishinjuku 6-Chome
Shinjuku-ku, Tokyo,
163-1130, Japan
Phone: +81-3-5323-6620
Fax: +81-3-5323-6621
Email: world@glsc.co.jp
Web: www.glsciences.com

GL Sciences B.V.

De Sleutel 9
5652 AS Eindhoven
The Netherlands
Phone: +31 (0)40 254 95 31
Email: info@glsciences.eu
Web: www.glsciences.eu

GL Sciences (ShangHai) Ltd.

Tower B, Room 2003,
Far East International Plaza,
NO,317 Xianxia Road,
Changning District.
Shanghai, China P.C. 200032
Phone: +86 (0)21-6278-2272
Email: contact@glsciences.com.cn
Web: www.glsciences.com.cn

GL Sciences, Inc. USA

4733 Torrance Blvd. Suite 255
Torrance, CA 90503
Phone: 310-265-4424
Fax: 310-265-4425
Email: info@glsciencesinc.com
Web: www.glsciencesinc.com

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Visit our Website at www.glsciences.com/distributors