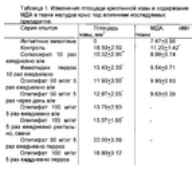
Method of preparing agent "olipifat" for treatment of patients with nononcological pathology in body

Abstract

FIELD: medicine, pharmaceutical technology. SUBSTANCE: method involves carrying out an alkaline hydpolysis/extraction of lignin-containing raw, oxidation with oxygen-containing gas, separation of its liquid phase, its acidification and separation of the precipitate formed. EFFECT: broadened spectrum of an agent. 4 cl, 2 tbl, 2 ex

Images (2)



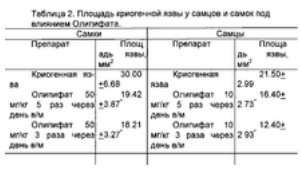


Таблица 2. Площадь криогенной язвы у самцов и самок под влиянием Олигифата.

Самки			Самцы		
Препарат		Площадь язвы, мм²	Препарат		Площадь язвы, мм²
Криогенная язва		30.00 ±6.68	Криогенная язва		21.50± 2.99
Олигифат 50 мг/кг 5 раз через день в/м		19.42 ±3.87	Олигифат 10 мг/кг 5 раз через день в/м		16.40± 2.73
Олигифат 50 мг/кг 3 раза через день в/м		18.21 ±3.27	Олигифат 10 мг/кг 3 раза через день в/м		12.40± 2.93

RU2141334C1

Russia

Download PDF Find Prior Art Similar

Other languages: Russian

Inventor: Д.В. Петухов, В.А. Трофимов, В.А. Филов, В.В. Резцова, Н.Е. Кильмаева, О.Ю. Маркелов, Б.Т. Пинчук, Ю.А. Смирнов

Worldwide applications

1998 ~~RU~~

Application RU98120572A events

1998-11-16 Priority to RU98120572A

1998-11-16 Application filed by Общество с ограниченной ответственностью "Лигфарм"

1999-11-20 Application granted

1999-11-20 Publication of RU2141334C1

Show all events

Info: Non-patent citations (1), Legal events, Similar documents, Priority and Related Applications

External links: Espacenet, Global Dossier, Discuss

Claims (4)

Hide Dependent translated from Russian

1. The method of obtaining funds for the treatment of non-oncological pathologies of the body, involving the processing of lignin-containing raw materials, characterized in that the raw materials are subjected to alkaline hydrolysis - extraction, oxidized with oxygen-containing gas, the liquid phase is separated, it is acidified and the target product precipitated is separated. 2. The method according to claim 1, characterized in that the hydrolysis-extraction is carried out in the field of ultrasonic vibrations. 3. The method according to claim 2, characterized in that the hydrolysis-extraction is carried out in the developed cavitation mode. 4. The method according to any one of claims 1 to 3, characterized in that the carrier is introduced into the resulting product.

Description

translated from Russian

The invention relates to a technology for producing drugs.

A known method of obtaining funds for the treatment of non-oncological pathologies of the body, involving the processing of lignin-containing raw materials by isolating soluble substances to obtain the drug "Lignosorb", which is a paste containing lignin and up to 20% residual polysaccharides, which is used as a non-specific enterosorbent (VFS 42-2203- 93).

The disadvantage of this method is to obtain funds with a narrow range of applications.

The technical result of the invention is to obtain funds with an extended range of applications.

This result is achieved by the fact that in the method for producing an agent for treating non-oncological pathologies of the body, comprising treating a lignin-containing raw material according to the invention, the raw material is subjected to alkaline hydrolysis-extraction, oxidized with an oxygen-containing gas, the liquid phase is separated, it is acidified and the target product precipitated is separated.

This allows you to get a tool for the treatment of a wide range of non-cancer pathologies of the body.

In a preferred embodiment of the present invention, hydrolysis-extraction is carried out in the field of ultrasonic vibrations, preferably in the developed cavitation mode.

This allows you to intensify the process and increase the productivity of the method.

In another preferred embodiment, a carrier is added to the resulting product.

This allows you to get the tool in various preparative forms, which facilitates its use in the treatment of pathologies of various localization.

The method is implemented as follows.

The lignin-containing raw materials are freed from soluble components and subjected to alkaline hydrolysis-extraction, preferably in the field of ultrasonic vibrations, most preferably in the developed cavitation mode, and then oxidized with an oxygen-containing gas, cooled and filtered the reaction mixture. The separated liquid phase is acidified to precipitate, which is separated from the liquid phase. After washing and drying, the precipitate is a water-insoluble powder of dark brown color without taste and odor, consisting of polyoxycarboxylic acids. The introduction of the obtained funds into the body leads to a weakening of lipid peroxidation in the tissues, which,

as you know, is enhanced by any excessive effects on the body of factors of a psychological, physical or chemical nature. The activation of lipid peroxidation is known to play an important role in the development of atherosclerosis, ischemia, myocardial infarction, tuberculosis and inflammatory processes. An increase in lipid peroxidation in the gastric mucosa leads to necrosis and the development of ulcers. The accumulation of lipid peroxidation products in tissues is accompanied by dysfunction of a number of enzyme systems. Based on this, it follows that the obtained by the proposed method tool, reducing the activity of lipid peroxidation, is effective in the treatment of a number of non-oncological pathologies of the body.

For the treatment of pathologies of different localization, the obtained product can be used in various preparative forms. So, for external use it is advisable to make an ointment by introducing the obtained product, for example, into glycerin, for rectal use, it is possible to make candles with the obtained product, for example, based on cocoa butter, and for injection the product can be dissolved, for example, in 0.2 M tetra-substituted sodium pyrophosphate and diluted, for example, with saline.

Example 1. The tool is prepared by hydrolysis-extraction of medical lignin in sodium hydroxide at a phase ratio of 1:10 and a temperature of 70 ^{o} C for 20 hours, oxidation with air at a temperature of 190 ^{o} C for 2.5 hours, filtering, acidification of the liquid phase and separating the precipitate with its subsequent washing and drying.

Example 2. The tool is prepared by hydrolysis-extraction of the lignin-containing preparation "Polyphepan" in potassium hydroxide with a cavitation index of 1.4, a phase ratio of 1: 8 and a temperature of 80 ^{o} C for 25 min, oxidation with oxygen at 200 ^{o} C for 30 min, filtering, acidifying the liquid phase and separating the precipitate, followed by washing and drying.

The tool obtained in examples 1 and 2 did not differ in properties.

To confirm the achievement of the technical result, experiments were carried out to determine the effectiveness of the use of the drug for various pathologies.

The experiments on the treatment of chronic gastric ulcer were carried out according to the Vertelkin method with cryogenic action on the stomach to form ulcers on outbred gray rats. In order to compare the therapeutic effect of the use of Olipifate with the drugs traditionally used in the treatment of peptic ulcer, animals were injected with the histamine H2 receptor blocker Famotidine at a dose of 40 mg / kg for 10 days orally to males and the Solcoseryl reporter 0.5 ml / kg daily within 10 days to females. The results are presented in tables 1 and 2.

From the above data it is seen that the effect of Olipifate is slightly weaker than the traditionally used drugs, and the effectiveness does not depend on gender, while the most effective are 3-fold intramuscular injections with a dose of 10 mg / kg.

When conducting in vitro tests, the effectiveness of the drug in the treatment of viral hepatitis was established. Positive results were obtained in the treatment of allergies, depriving ordinary, superficial ulcers, including trophic, and eczema.

Thus, the proposed method allows to obtain a tool with a wide range of applications for the treatment of non-cancer pathologies of the body.

Non-Patent Citations (1)

Title
ВФС 42-2203-93. *

* Cited by examiner, † Cited by third party

Similar Documents

Publication	Publication Date	Title
EP0037319B2	1995-06-28	Mucopolysaccharides having biological properties; their preparation and use as medicines
RU2141334C1	1999-11-20	Method of preparing agent "olipifat" for treatment of patients with nononcological pathology in body
RU2522455C2	2014-07-10	Method for synthesis of ester and glycyrrhetinic acid derivative and deoxyglycyrrhetinic acid ester compound
JP4491090B2	2010-06-30	Apoptosis inducer
Kluyver et al.	1951	The production of homogentisic acid out of phenylacetic acid byAspergillus niger
JPWO2005034975A1	2006-12-21	Plant seed extract composition and method for producing the same
Dodds et al.	1924	Some Observations on the Properties and Preparation of Insulin, with Special Reference to the Picrate-Acetone Method of Preparation
JPH07233061A	1995-09-05	Production of orally administrting agent having action for suppressing proliferation of malignant tumor cell of animal including human
KR20150134491A	2015-12-02	Composition for the prevention and treatment of inflammatory diseases comprising the penicillinolide A isolated from marine fungi
RU2163816C1	2001-03-10	Method of preparing agent for treatment of non-oncological pathology of body
CN109810049B	2021-01-15	Compound containing pyridine and extraction method thereof
JPH10287582A	1998-10-27	Suppressant for liberation of histamine comprising bark extract
FR2507477A1	1982-12-17	Antihypertensive extract from olive leaves - contg. oleuropeine, using methanol as extracting solvent
KR100953177B1	2010-04-15	Resveratrol derivative having anti-inflammatory and immono-suppressive effects and the pharmaceutical composition containing the same
JPH08208501A	1996-08-13	Anti-hericobacter pylori medicine containing extract of garcinia mangostana l.
RU2102083C1	1998-01-20	Method of antitumor agent preparing
US2912360A	1959-11-10	Process for obtaining intrinsic factor

EP1132090B1	2003-08-13	Method for producing an agent for treating ulcers of the organism
JPH10306032A	1998-11-17	Potency-enhancing agent
US2103075A	1937-12-21	Therapeutic preparation and method of making it
JP2678617B2	1997-11-17	Large garlic extract
US2357103A	1944-08-29	Preparation of pyrogen-free urogastrone
JP2017057178A	2017-03-23	Extract of perilla frutescens var. crispa f. viridis. and production methods thereof
JP3187412B2	2001-07-11	Agent for prevention and treatment of bacterial fish disease
JP2642316B2	1997-08-20	Anticancer drug

Priority And Related Applications

Priority Applications (13)

Application	Priority date	Filing date	Title
RU98120572A	1998-11-16	1998-11-16	Method of preparing agent "olipifat" for treatment of patients with nononcological pathology in body
CA002348744A	1998-11-16	1999-11-16	Method for producing an agent for treating non-cancerous pathologies of the organism
KR10-2001-7006195A	1998-11-16	1999-11-16	Method for producing an agent for treating non-cancerous pathologies of the organism
ES99958545T	1998-11-16	1999-11-16	PROCEDURE FOR THE PREPARATION OF AN AGENT FOR THE TREATMENT OF ULCERAS OF THE ORGANISM.
IL14318499A	1998-11-16	1999-11-16	Method for producing an agent for treating non-cancerous pathologies of the organism
PT99958545T	1998-11-16	1999-11-16	METHOD FOR PRODUCTION OF AN AGENT FOR TREATMENT OF PATHOLOGIES NOT ORGANIC CANCERIANS
JP2000582051A	1998-11-16	1999-11-16	Method for producing therapeutic agent for non-tumor lesions in living body
PCT/RU1999/000439	1998-11-16	1999-11-16	Method for producing an agent for treating non-cancerous pathologies of the organism
AT99958545T	1998-11-16	1999-11-16	METHOD FOR PRODUCING AN ACTIVE SUBSTANCE FOR TREATING ULCERA OF THE ORGANISM
DK99958545T	1998-11-16	1999-11-16	A method of preparing an agent for treating wounds in the organism
DE69910424T	1998-11-16	1999-11-16	METHOD FOR PRODUCING AN ACTIVE SUBSTANCE FOR TREATING ULCERA OF THE ORGANISM
EP99958545A	1998-11-16	1999-11-16	Method for producing an agent for treating ulcers of the organism
IL143184A	1998-11-16	2001-05-16	Method for producing an agent for treating non-cancerous pathologies of the organism

Applications Claiming Priority (1)

Application	Filing date	Title
RU98120572A	1998-11-16	Method of preparing agent "olipifat" for treatment of patients with nononcological pathology in body

Legal Events

Date	Code	Title	Description
2016-04-10	PC41	Official registration of the transfer of exclusive right	**Effective date**: 20160323
2017-07-27	MM4A	The patent is invalid due to non-payment of fees	**Effective date**: 20161117

Concepts

machine-extracted

Download Filter table

Name	Image	Sections	Count	Query match
extraction		claims,abstract,description	9	0.000
lignin		claims,abstract,description	8	0.000
liquid phase		claims,abstract,description	7	0.000
oxygen		claims,abstract,description	5	0.000
oxygen		claims,abstract,description	5	0.000

oxygen	claims,abstract,description	5	0.000
gas	claims,abstract,description	4	0.000
raw material	claims,description	6	0.000
oncological	claims,description	4	0.000
carrier	claims,description	2	0.000
alkaline hydrolysis reaction	claims	1	0.000
drug	abstract,description	7	0.000
effects	abstract,description	4	0.000
precipitate	abstract,description	4	0.000
oxidation	abstract,description	3	0.000
oxidation reaction	abstract,description	3	0.000
substance	abstract,description	3	0.000
chemical substances by application	abstract,description	2	0.000
pH reduction	abstract,description	2	0.000
separation method	abstract	2	0.000
spectrum	abstract	1	0.000

Show all concepts from the description section

Data provided by IFI CLAIMS Patent Services