

WIPO COVID-19 related information resources

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WIPO COVID-19 response package



WIPO COVID-19 response package

- In October 2021, WIPO Member States approved a package of support measures as part of [WIPO's Program of Work and Budget 2022/23](#).
- WIPO resources for COVID-related activities in 2022/23: **3 million CHF**.
- The implementation of the package will require a '**whole of WIPO**' approach.
- The **WIPO COVID-19 Focal Point** will coordinate the implementation of the package, working closely with the Regional and National Development Sector and other Lead Sectors, ensuring a timely and effective response WIPO Member State requests.
- WIPO's trilateral cooperation with the WHO and WTO is led by the Global Challenges and Partnerships Sector.
- WIPO will engage in a continuous dialogue with Member States to ensure that the package meets their needs and priorities.



WIPO COVID-19 response package

Expected Results:

- More effective **communication and engagement** world-wide to raise awareness of and increase knowledge about the potential of IP to improve the lives of everyone, everywhere (ER1.1)
- WIPO **brings the international community together** to proactively address emerging issues and policy challenges at the global level relating to IP, innovation and creativity (ER2.2)
- Effective **interaction and partnerships** with the UN, IGOs and NGOs in support of global goals to which IP can contribute (ER2.4)
- Wider and more effective use of **WIPO's global IP systems, services and knowledge and data** (ER3.1)
- **Knowledge transfer and technology adaptation** is facilitated through WIPO's IP-based platforms and tools to address global challenges (ER3.3)
- Increased **IP knowledge and skills** in all Member States (ER4.3)
- More innovators, creators, SMEs, universities, research institutions and communities **leverage IP successfully** (ER4.4)

WIPO – WTO – WHO Trilateral cooperation incl. Trilateral Technical Assistance Gateway & 2022 Trilateral Symposium (June, 2022)

Activities include:

IP legislative and policy advice relating to the COVID-19 pandemic

New Services by **WIPO Arbitration and Mediation Centre** incl. launch of WIPO ADR Guidance Document for the Life Sciences Sector

Platforms and structures to accelerate knowledge and technology transfer, incl. through TISCs

Digitalization of knowledge resources, incl. education materials in LDCs

New **Patent Landscape Report** (March, 2022) and **PATENTSCOPE** portal

Capacity building, incl. through IPTIs

Upcoming WIPO Patent Landscape Report COVID-19-related vaccines and therapeutics

- First observations on patenting activity from January 2020 to September 2021
- The report will be [available as of March 10, 2022](#)
- Save the date: [March 10, 2022 – 2pm – 4pm](#) CET



Scan for registration details and program

PATENTSCOPE and COVID-19




PATENTSCOPE: an introduction

- Free public patent search engine developed by WIPO with the assistance of its member states: patentscope.wipo.int
- Powerful latest generation search engine (including for chemistry)
- Comprehensive coverage:
 - PCT applications and regional and national patent collections
 - 72 different data sources, more than 100 million patent records
- Focus on full text and multilinguism

=> you can use PATENTSCOPE to get access to patent information in all languages related to the fight against COVID-19

PATENTSCOPE: how does it look?

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SIMPLE SEARCH

Using PATENTSCOPE you can search 101 million patent documents including 4.3 million published international patent applications (PCT). [Detailed coverage information](#)

PCT publication 06/2022 (10.02.2022) is now available [here](#). The next PCT publication 07/2022 is scheduled for 17.02.2022. [More](#)

Check out the [new PATENTSCOPE features](#): CPC, NPL, Families ...

[Search Facility to Support COVID-19 Innovation Efforts](#)

Field	▼	Search terms...	
Front Page			

Query Examples

FP:(coronavirus)



6,784 results Offices all Languages en Stemming true Single Family Member false Include NPL false



Sort: Relevance ▾ Per page: 10 ▾ View: All ▾

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Machine translation ▾

1. WO/2021/239147 B-CORONAVIRUS ANTIGEN, B-CORONAVIRUS BIVALENT VACCINE, PREPARATION METHODS THEREFOR, AND APPLICATIONS THEREOF

WO - 02.12.2021

Int.Class [A61K 39/215](#) Appl.No PCT/CN2021/097463 Applicant INSTITUTE OF MICROBIOLOGY, CHINESE ACADEMY OF SCIENCES Inventor GAO, Fu

The present invention relates to a β -coronavirus antigen, a β -coronavirus bivalent vaccine, preparation methods therefor, and applications thereof. The amino acid sequence of the β -coronavirus antigen comprises, according to a sequence from an end N to an end C, an amino acid sequence arranged according to a [A-B]-[A'-B'] style or an amino acid sequence arranged according to a [A-B]-C-[A'-B'] style, wherein A-B represents part of the amino acid sequence or all of the amino acid sequence deriving from a receptor binding domain of a surface spike protein of a β -coronavirus; A'-B' represents part of the amino acid sequence or all of the amino acid sequence deriving from a receptor binding domain of a surface spike protein of another β -coronavirus; C represents connection of the amino acid sequences; and the β -coronavirus antigen is of a single-chain heterodimer structure. By using the β -coronavirus antigen, the β -coronavirus bivalent vaccine is obtained, and the bivalent vaccine can stimulate a mouse to produce a strong antibody response.

2. WO/2021/155323 COMPOSITIONS AND METHODS FOR PREVENTING AND TREATING CORONAVIRUS INFECTION-SARS-COV-2 VACCINES

WO - 05.08.2021

Int.Class [C07K 14/005](#) Appl.No PCT/US2021/015946 Applicant BETH ISRAEL DEACONESS MEDICAL CENTER, INC. Inventor BAROUCH, Dan, H.

The invention relates to immunogenic compositions and vaccines containing a coronavirus [e.g., Wuhan coronavirus [2019-nCoV; also referred to as SARS-CoV-2]] protein or a polynucleotide encoding a coronavirus [e.g., Wuhan coronavirus [2019-nCoV; SARS-CoV-2]] protein and uses thereof. The invention also provides methods of treating and/or preventing a coronavirus [e.g., Wuhan coronavirus [2019-nCoV; SARS-CoV-2]] infection by administering an immunogenic composition or vaccine to a subject [e.g., a human]. The invention also provides methods of detecting and/or monitoring a protective anti-coronavirus [e.g., Wuhan coronavirus [2019-nCoV; SARS-CoV-2]] antibody response [e.g., anti-coronavirus antibody response, e.g., anti-2019-nCoV antibody response, e.g., anti-Spike antibody response, e.g., anti-Spike neutralizing antibody response]. The present invention relates to isolated nucleic acid and/or recombinant nucleic acid encoding a coronavirus S protein, in particular a SARS-CoV-2 S protein, and to the coronavirus S proteins, as well as to the use of the nucleic acids and/or proteins thereof in vaccines.

3. WO/2021/225344 PEPTIDE FOR SUPPRESSING CORONAVIRUS AND USE THEREOF

WO - 11.11.2021

Int.Class [C07K 7/08](#) Appl.No PCT/KR2021/005563 Applicant INDUSTRY ACADEMIC COOPERATION FOUNDATION, HALLYM UNIVERSITY Inventor KWON, Hyung Joo

The present invention relates to: a therapeutic composition for coronavirus comprising, as an active ingredient, one peptide selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 6, and SEQ ID NO: 8 that binds to a coronavirus N-protein, a coronavirus-derived spike protein, or a fragment of the spike protein; and a composition that binds to a coronavirus N-protein comprising, as an active ingredient, the coronavirus-derived spike protein or the fragment of the spike protein. It is suggested that the peptides of the present invention, based on the understanding and targeting of the interaction of the coronavirus S protein and N protein of the present invention, have an effect that can be helpful in the treatment of coronaviruses including MERS-CoV, SARS-CoV-2, SARS-CoV, and HCoV-OC43.

4. WO/2021/169273 USE OF ALBIFLORIN IN TREATMENT OF CORONAVIRUS PNEUMONIA

WO - 02.09.2021

Int.Class [A61K 31/7048](#) Appl.No PCT/CN2020/117638 Applicant ZHANG, Zuoquang Inventor ZHANG, Zuoquang

1. W02021239147 - B-CORONAVIRUS ANTIGEN, B-CORONAVIRUS BIVALENT VACCINE, PREPARATION METHODS THEREFOR, AND APPLICATIONS THEREOF



PCT Biblio. Data **Full Text** Drawings ISR/WOSA/A17[2][a] National Phase Notices Documents

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Publication Number

W0/2021/239147

Publication Date

02.12.2021

International Application No.

PCT/CN2021/097463

International Filing Date

31.05.2021

IPC

A61K 39/215 2006.1

A61P 31/14 2006.1

A61P 11/00 2006.1

CPC

A61K 2039/54

A61K 2039/70

A61K 39/12

A61P 11/00

A61P 31/14

C12N 2770/20034

Applicants

中国科学院微生物研究所 INSTITUTE OF MICROBIOLOGY, CHINESE ACADEMY OF SCIENCES [CN]/[CN]

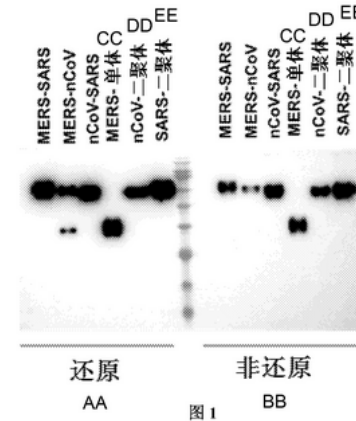
中国北京市 朝阳区北辰西路1号院3号戴达蒙 | DAI, Lianpan No.3, Yard1, Beichenxi Road, Chaoyang District Beijing 100101, CN

Title

[EN] **β-CORONAVIRUS** ANTIGEN, **β-CORONAVIRUS** BIVALENT VACCINE, PREPARATION METHODS THEREFOR, AND APPLICATIONS THEREOF

[FR] ANTIGÈNE DU **β-CORONAVIRUS**, VACCIN BIVALENT DU **β-CORONAVIRUS**, LEURS PROCÉDÉS DE PRÉPARATION ET LEURS APPLICATIONS

[ZH] 一种β冠状病毒抗原、β冠状病毒二联疫苗及其制备方法和应用



AA Reduction
BB Non-reduction
CC MERS-monomer

DD nCoV-dimer
EE SARS-dimer

Abstract

[EN] The present invention relates to a **β-coronavirus** antigen, a **β-coronavirus** bivalent vaccine, preparation methods thereof, and applications thereof. The amino acid sequence of the **β-coronavirus** antigen comprises, according to a sequence from an end N to an end C, an amino acid sequence arranged according to a [A]-[B]-[A']-[B']-style or

PATENT Searching is not an easy task:

- You need to know the good keywords to search, with all their synonyms, in all the languages

AND/OR

- You need to know the patent classification codes related to your search

AND

- You need to know the fields of the search engines you are using, as well as the search operators

PATENTSCOPE COVID-19 INDEX

The WIPO COVID-19 Search Facility of PATENTSCOPE will provide scientists, engineers, public health policymakers, industry actors and members of the general public with an easily accessible source of intelligence for improving the detection, prevention, and treatment of diseases such as the novel coronavirus.

"Given the drastic impact of the COVID-19 crisis on human health and welfare, the world needs easy access to every bit of information available for the successful innovation in the pursuit of vaccines, treatments and cures. Patent documents are rich sources of technological know-how acquired by humans over the centuries," said WIPO Director General Francis Gurry. "I am pleased that WIPO's new patent-searching tool helps disseminate information on technologies that others may build upon for the global fight against COVID-19."

At the time of release, the new PATENTSCOPE search facility provides dozens of search queries specially curated by patent information experts who have identified technological areas relevant to the detection, prevention and treatment of COVID-19.

PATENTSCOPE contains over 83 million patent and related documents, provides comprehensive searching of patent information with multi-lingual search capabilities and an automatic translation system that uses Artificial Intelligence (AI) technologies for highly accurate results.

Via the new COVID-19 functionality, thousands of documents deemed of potential use to innovators working on COVID-19 mitigation efforts would be returned.

[Full press release](#)

Artificial respiration

Diagnostics

Disinfection

Informatics

Medical Equipment

Medical Facilities and Transport

Medical Treatment

Medical treatment/Prophylactic

Medical treatment/Therapeutic

Personal protective equipment

IPC Symbol[s]	Title	Query	+Keywords
A61K 31/00	Medicinal preparations containing organic active ingredients	EN	EN
A61K 33/00	Medicinal preparations containing inorganic active ingredients	EN	EN
A61K 36/00	Medicinal preparations of undetermined constitution containing material from algae, lichens, fungi or plants, or derivatives thereof, e.g. traditional herbal medicines	EN	EN

IC:A61K31/00 AND EN_ALLTXT:(coronavirus OR coronaviruses OR coronaviridae OR coronavirinae OR orthocoronavirus OR orthocoronaviruses OR orthocoronaviridae OR orthocoronavir



8,271 results Offices all Languages Stemming false Single Family Member true Include NPL false



Sort: Relevance ▼ Per page: 10 ▼ View: All ▼

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Machine translation ▼

1. [WO/2021/181261](#) LACTOFERRIN FOR ORAL INHALATION USE FOR THE TREATMENT OF A DISEASE CAUSED BY A SARS-CORONA VIRUS

WO - 16.09.2021

Int.Class [A61K 38/40](#) Appl.No PCT/IB2021/051941 Applicant SOFAR S.P.A. Inventor BIFFI, Andrea

The present invention relates to a composition comprising lactoferrin for inhalation use in the treatment of viral infections of the respiratory system, and related symptoms or disorders, caused by a SARS- coronavirus [e.g. COVID-19 disease]. In addition, the present invention relates to a device for the administration - through the inhalation route - of said composition comprising lactoferrin and the use thereof in said methods for the treatment of viral infections.

2. [WO/2021/175250](#) COMPOUNDS AND METHODS FOR TREATING DISEASES AND/OR CONDITIONS CAUSED BY CORONAVIRUS

WO - 10.09.2021

Int.Class [A61K 31/43](#) Appl.No PCT/CN2021/078875 Applicant MIOS PHARMACEUTICALS LIMITED Inventor LEE, Wai Yip Thomas

Compounds and compositions, for example vardenafil, for treating diseases and/or conditions caused by, arising from, and/or associated with coronavirus in a subject, for example a subject infected with SARS-CoV-2 or other coronavirus. Combinations of agents useful for treating diseases and/or conditions caused by, arising from, and/or associated with coronavirus in a subject, for example, vardenafil and Remdesivir, are also provided.

3. [WO/2021/211792](#) TREATMENT OF CORONAVIRUS INFECTIONS WITH AURANOFIN

WO - 21.10.2021

Int.Class [A61K 31/7135](#) Appl.No PCT/US2021/027404 Applicant GEORGIA STATE UNIVERSITY RESEARCH FOUNDATION, INC. Inventor KUMAR, Mukesh

The present disclosure provides methods for treating viral infections, in particular treating coronavirus infections in a subject with auranofin.

4. [3900723](#) NACHR, SUCH AS NICOTINE, FOR USE IN THE PREVENTION AND THE TREATMENT OF COVID-19 DISEASE

EP - 27.10.2021

Int.Class [A61K 31/465](#) Appl.No 20315196 Applicant UNIV SORBONNE Inventor MIYARA MAKOTO

The invention relates to a ligand having a modulatory effect on neuronal nicotinic acetylcholine receptor (nAChR) or a pharmaceutical salt thereof for use for preventing and/or treating viral infections due to at least one betacoronavirus, preferably a Severe Acute Respiratory Syndrome-related coronavirus.

5. [3884946](#) COMPOUNDS FOR TREATING OR PREVENTING A CORONAVIRIDAE INFECTION & METHODS AND USES FOR ASSESSING THE OCCURRENCE OF A CORONAVIRIDAE INFECTION

EP - 29.09.2021

Int.Class [A61K 31/47](#) Appl.No 20305327 Applicant ABIVAX Inventor TAZI JAMAL

Searching chemistry in patents is even more complex:

- Chemical compounds can be represented in many different ways, with different names, technical representations and embedded drawings

AND

- Chemical compounds can even be in the scope of protection of a patent, while not been directly cited in the patent text, using «recipes» to describe sets of related chemical compounds: these are called Markush structures

CHEMICAL COMPOUNDS SEARCH ▾

Convert structure

Upload structure

Structure editor

Found compounds

Found Markush Formulas

Search type

Compound name

Type an accepted name, commercial name, CAS name, IUPAC name

ivermectin

Search for scaffold

Include enumerated Markush structures

Offices

All

Reset

Show in editor

Exact Structure Search



21,690 results

Offices all

Languages en

Stemming true

Single Family Member false

Include NPL true



Sort: Pub Date Asc ▾ Per page: 10 ▾ View: All ▾

< 1 / 2,169 ▾ >

Download ▾

Machine translation ▾

1. [0045655](#) SOLUBILISATION DE L'IVERMECTINE DANS L'EAU.

EP - 10.02.1982

Int.Class [B01J 23/34](#) ⓘ Appl.No 81303545 Applicant MERCK & CO. INC. Inventor LO, PAK-KAN ALBERT

Ivermectin, an antiparasitic agent which is insoluble and unstable in water, is solubilized by the formation of colloidal particles, called micelles, with surface-active agents as solubilizers and stabilized by using water-miscible organic cosolvents and/or appropriate substrates in the aqueous formulation. The liquid formulations are suitable for use as parenteral or oral administration for the treatment of parasitic infections.

2. [4333925](#) DERIVATIVES OF C-076 COMPOUNDS

US - 08.06.1982

Int.Class [A01N 43/90](#) ⓘ Appl.No 06262082 Applicant Merck & Co., Inc. Inventor Buhs Rudolf P.

There are disclosed certain new derivatives of C-076 compounds which have been isolated from the livers of animals that had been administered ivermectin and the in vitro incubation of such compounds with animal liver preparations. The compounds retain the basic ivermectin structure, however, 24-methyl group has been oxidized to a hydroxy methyl group and, in some of the new compounds the disaccharide substituent of the starting materials has been cleaved to a monosaccharide moiety. The new compounds have been found to retain the biological activity of the parent C-076 compounds. The compounds are thus potent antiparasitic agents and compositions and methods for such uses are also disclosed.

3. [0059616](#) PROCÉDÉ D'ÉLIMINATION DE CATALYSEURS MÉTALLIQUES DE LIQUEURS.

EP - 08.09.1982

Int.Class [C07H 17/08](#) ⓘ Appl.No 82300982 Applicant MERCK & CO. INC. Inventor ROBERTS, F. EDWARD4. [0065403](#) DÉRIVÉS DES COMPOSÉS C-076.

EP - 24.11.1982

Int.Class [A01N 43/90](#) ⓘ Appl.No 82302375 Applicant MERCK & CO. INC. Inventor BUHS, RUDOLF P.

Certain new derivatives of C-076 compounds have been isolated from the livers of animals that had been administered ivermectin and the in vitro incubation of such compounds with animal liver preparations. The compounds have the formula: in which R1 is R2 is methyl or ethyl and the 22,23 bond is saturated or (but only when R2 is ethyl) ethylenically unsaturated, or R is hydrogen, R2 is methyl or ethyl and the 22,23 bond is saturated. ...The new compounds have been found to retain the biological activity of the parent C-076 compounds. The compounds are thus potent antiparasitic agents and compositions and methods for such uses are also disclosed.

5. [4389397](#) SOLUBILIZATION OF IVERMECTIN IN WATER

US - 21.06.1983

Int.Class [A61K 31/35](#) ⓘ Appl.No 06304124 Applicant Merck & Co., Inc. Inventor Lo Pak-Kan A.

Ivermectin, an antiparasitic agent which is insoluble and unstable in water, is solubilized by the formation of colloidal particles, called micelles, with surface active agents as solubilizers and stabilized by using cosolvents and/or appropriate substrates in the aqueous formulation. The liquid formulations are suitable for use as parenteral or oral administration for the treatment of parasitic infections.



21,689 results

Offices all

Languages en

Stemming true

Single Family Member false

Include NPL true



ANALYSIS

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IPC code		Applicants		Inventors		Publication Dates		Countries	
A01N	11,002	BAYER CROPSCIENCE AG	1,439	FISCHER REINER	306	1982	4	United States of America	6,305
A61K	10,198	SYNGENTA PARTICIPATIONS AG	1,090	ERDELEN CHRISTOPH	272	1983	3	PCT	4,905
C07D	7,459	BAYER AG	815	WACHENDORFF-NEUMANN ULRIKE	269	1984	10	China	3,676
A61P	4,774	DOW AGROSCIENCES LLC	811	MALSAM OLGA	218	1985	9	Japan	3,406
A01P	4,149	BASF SE	451	DAHMEN PETER	215	1986	11	European Patent Office	1,680
C07C	1,585	ISHIHARA SANGYO KAISHA LTD	194	WACHENDORFF-NEUMANN, ULRIKE	196	1987	21	Republic of Korea	1,046
C12N	1,356	WACHENDORFF NEUMANN ULRIKE	176	ERDELEN, CHRISTOPH	189	1988	15	Russian Federation	340
C07K	1,241	NOVARTIS AG	165	TURBERG ANDREAS	176	1989	30	Eurasian Patent Organization	331
C07H	662	ALLERGAN INC	148	FEUCHT DIETER	172	1990	35		
C07F	539	NIPPON SODA CO LTD	146	BRETSCHNEIDER THOMAS	171	1991	44		
G01N	524	MERCK AND CO INC	145	ARNOLD CHRISTIAN	170	1992	51		
C12P	360	ERDELEN CHRISTOPH	134	KUCK KARL-HEINZ	159	1993	61		
C12Q	339	SUMITOMO CHEMICAL COMPANY LIMITED	132	DUNKEL RALF	155	1994	51		
A61L	275	MERIAL LIMITED	131	ELBE HANS-LUDWIG	151	1995	72		
A01C	269	SUMITOMO CHEMICAL CO	127	STENZEL, KLAUS	149	1996	113		
A01M	252			HUNGENBERG HEIKE	145	1997	172		
A61Q	251					1998	245		

A professional silver and black microphone with a perforated grille and a black boom arm is mounted on a black stand. It is positioned on a blue mousepad. In the background, a white computer keyboard is visible, slightly out of focus. The microphone has a blue accent band near the base of the grille.

wipo.int/patentscope/en/webinar

Georges Ghandour

*Development Agenda Coordination Division,
Regional and National Development Sector*



Database on Flexibilities in the Intellectual Property System

At the 6th session of the CDIP, Member States agreed to establish the Database on Flexibilities in the Intellectual Property (IP) System.

Access the database on flexibilities in the IP System

Field of IP

Type of flexibility
Compulsory licenses and government use
Criminal sanctions for patent infringement
Disclosure related flexibilities
Exclusion from patentability of plants
Exhaustion of rights

Country / Organization
African Intellectual Property Organization
African Regional Industrial Property Organization (ARIP)
Albania
Algeria
Andean Community
Andorra
Angola

Updates by member states

How does the Database work?

Users can conduct searches by type of flexibilities and national / regional jurisdictions.

Visit the Database on Flexibilities at:

www.wipo.int/ip-development/en/agenda/flexibilities/database.html

Database on Flexibilities in the Intellectual Property System

Who can benefit from the Database?

The Database can be useful for policy and law makers, IP experts, academicians and researchers.

What is the Updating Mechanism of the Database?

As decided by the CDIP, Member States can provide updates on their national provisions related to the flexibilities included in this database.



Development Agenda Portal: Technology Transfer and Open Collaboration

The DA portal of Technology Transfer and Open Collaboration is a digital repository of materials prepared in the context of three DA projects on technology transfer and open collaboration, namely:

- *Innovation and Technology Transfer Support Structure for National Institutions;*
- *Intellectual Property and Technology Transfer: “Common Challenges – Building Solutions”;*
- *Open Collaborative Projects and IP-Based Models*

The DA Portal incorporates a dedicated web forum for comments and feedback.





Thank you!



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