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CAS SciFinder Discovery Platform

加速您的科学发现

随着科学信息量不断高速增长，在纷繁复杂的信息中快速找到真正所需的科研信息可能极具挑战。CAS SciFinder Discovery Platform 是美国化学文摘社 (CAS) 隆重发布的新一代权威科学研究工具，是业界领先的检索引擎之一。CAS 国际科学家团队追踪全球科技进展，收录汇总、标引、关联全球专利、科技期刊等内容，学科收录涵盖化学及相关领域，如生物、医药、材料、食品、应用化学、化学工程、农学、高分子、物理等跨学科的科技信息；收录文献类型包括期刊、专利、会议论文、学位论文、图书、技术报告、评论、预印本和网络资源等。无论您是找寻并确定新的研究课题、申请基金、撰写论文，还是为新的项目制定实验计划或找寻合作者以推动您所在领域的研究进程，CAS SciFinder Discovery Platform 助力您更快地找到相关见解。

CAS SciFinder Discovery Platform 包括：化学及相关学科智能研究平台 CAS SciFinder、化学分析方法解决方案 CAS Analytical Methods 及制剂（配方）解决方案 CAS Formulus。

- 利用业界领先的相关性搜索引擎更快定位关键信息。
- 全面获取物质信息，自信地开展实验。
- 利用逆合成分析工具 (Retrosynthesis) 快速实现对已知和新物质的逆合成分析，确定最优路线。
- 专利解决方案 CAS PatentPak 在定位和分析大量专利中的化学结构方面，可以为师生节省一半以上的时间。
- 马库什结构 (Markush) 检索有助于快速判定化合物的新颖性和创造性。
- 利用引文地图 (Citation Map)，全面了解相关学科全景。
- 利用构效关系 (SAR)、吸收、分布、代谢、排泄和毒性 (ADMET) 数据，探索药物 - 靶点 - 毒性的相互作用。
- 检索和分析生物序列及其相关文献，助力生命科学研究。
- 运用配方设计功能 (Formulation Designer) 为配方设计提供思路。
- 利用最古老的德国化学文摘 (ChemZent) 的英文版，可追溯化学科学起源、丰富学生的化学历史知识。

CAS 词库

CAS Lexicon: CAS 信息科学家创建的叙词表, 建立数据间的关联, 形成独特的 CAS 知识图谱, 提高信息检索效率和精准性。

Search CAS Lexicon

Pharmaceutical liposomes

Search Concept

Preferred Concept

☒ Pharmaceutical liposomes

This will search synonyms: Bilayer liposomes; Bilayer pharmaceutical ve...

View more synonyms

Broader Concepts (3)

☐ Liposomes

☐ Pharmaceutical carriers

☐ Pharmaceutical colloids

Narrower Concepts (11)

☐ Ethosomes

☐ Pharmaceutical controlled-release liposomes

☒ Pharmaceutical immunoliposomes

☐ Pharmaceutical lipoplexes

☒ Pharmaceutical multilamellar liposomes

View All

Related Concepts (2)

☐ Liposomal dispersions

☐ Pharmaceutical proliposomes

AND OR NOT

Add to Query

Clear Query

Search

文献检索

References: 结果集按相关性排列, 提供多个聚类筛选项, 节省文献分析时间。

References search for "Liposome and Nucleic Acid Drugs"

Substances Reactions Citing Knowledge Graph

We are displaying the most relevant results. Learn about result relevance.

Load All Results

Filter Behavior

Filter by Exclude

Search Within Results

Publication Year

Language

Publication Name

Organization

Author

Document Type

34,061 Results

Sort: Relevance View: Partial Abstract

1

Liposomes and virosomes as delivery systems for antigens, nucleic acids and drugs

By: Felnerova, Diana; Viret, Jean-Francois; Glueck, Reinhard; Moser, Christian

Current Opinion in Biotechnology (2004), 15(6), 518-529 | Language: English, Database: CAlplus and MEDLINE

A review. Lipid-based vesicles are a very promising approach to treat diseases such as cancer, chronic infections and auto-immunity. Modern drug encapsulation methods allow efficient packing of therapeutic substances inside liposomes, thereby reducing the systemic toxicity of the drugs. Specific targeting can enhance the therapeutic effect of the drugs through their accumulation at the diseased site. In the vaccine field, the integration of functional viral envelope proteins into liposomes has led to an antigen carrier and delivery system termed a virosome, a clinically proven vaccine platform for ...

View More

丰富的聚类分析

Substances (0) Reactions (0) Citing (263) Citation Map

2

Potential efficacy of cell-penetrating peptides for nucleic acid and drug delivery in cancer

By: Bolhassani, Azam

Biochimica et Biophysica Acta, Reviews on Cancer (2011), 1816(2), 232-246 | Language: English, Database: CAlplus and MEDLINE

A review. Cell penetrating peptides (CPPs) are short amphipathic and cationic peptides that are rapidly internalized across cell membranes. They can be used to deliver mol. cargo, such as imaging agents (fluorescent dyes and quantum dots), drugs, liposomes.

引文地图

Citation Map: 便捷地追踪前向、后向引用, 并提供多个筛选项对引文进行筛选。

Filter By Cited By Citing

Filter Behavior

Filter by Exclude

Document Type

☐ Journal (250)

☐ Review (132)

☐ Biography (2)

☐ Clinical Trial (1)

☐ Editorial (2)

☐ Historical (3)

Author

Concept

☐ Liposomes (116)

☐ Humans (107)

☐ Animals (89)

☐ Pharmaceutical liposomes (87)

☐ Homo sapiens (57)

View All

Language

Citation Map Key

☒ Cited by Root Document

☐ References Citing Root Document

Expand Citations

Create Map

View 76 More

Reset

View 13 More

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物质检索

Substances：获得物质参与的反应、研究物质的文献、物质详情，提高理解物质信息的效率。

Structure Match

As Drawn (2)

Substructure (6,732)

Similarity (246K)

Filtering:

Aromatic Rings: 1 X

Functional Group: Unsaturated ketone X

Stereochemistry: 3 Selected X

572 Results

Sort: Relevance View: Partial

便捷切换精准、亚结构、相似结构

1

2

3

193818-88-1

6650-43-7

23H30O3

27H32O2

26H32O3

24-Norchola-4,20,22-trien-3-one, 21,23-epoxy-11β-hydroxy-

1'-H-Naphtho[2',3':13,17]-18-norandrost-4-en-3-one, 4',17-dihydro-11-hydroxy-4'-m...

Androst-4-en-3-one, 17-benzoyl-3,11-dihydroxy-, (11β,17β)-

2

2

0

1

1

0

2

0

0

References

Reactions

Suppliers

Reference

Reaction

Suppliers

References

Reactions

Suppliers

生物活性数据

Bioactivity Data：利用 SAR 和 ADMET 数据，探索药物 - 靶标 - 毒性的相互作用，评估化合物的安全性。

Structure Activity Relationships CAS LIFE SCIENCES

Absorption, Distribution, Metabolism, and Excretion Data CAS LIFE SCIENCES

Toxicity CAS LIFE SCIENCES

Ligand Target Function Parameter... Value Disease Organism Clear All Filters

Ligand	Target	Function	Parameter	Value	Disease	Organism	Assay Information
2460476-35-9	GLP-1R	Inhibition	IC50	0.54 nM	Malaria	-	View Detail
2460476-35-9	GLP-1R	Inhibition	IC50	0.75 nM	Malaria	-	View Detail
2460476-35-9	GLP-1R	Inhibition	IC50	21 nM	Malaria	-	View Detail

序列检索

Sequences：支持多种序列检索选项 , 包括 BLAST 检索、输入 CDR 区检索抗体以及用可变符号检索序列。

Sequences search for your query

References

BLAST Search Details

Sequence Type: Protein

Search Within: Proteins

BLAST Algorithm: BLASTp

NCBI Included: Yes

Alignment Identity: -

Query Coverage: 90%

E-Value: 10

Match with Gaps?: No

Gap Costs: Existence 11

Extension 1

Word Size: 3

Bioscape Analysis

Visually explore sequence similarity with a new tool.

Create Bioscape Analysis

Filter by

E-Value

Query Coverage %

Query Details

GF SGLQGPPG PPGSPGBQGP SGASGPAGPR View More

100,000 Results

Sort: Alignment Identity View: Collapsed

1

Query

Subject

Alignment Identity: 100%

Matches: 30

Mismatches: 0

View Less

Alignment

Subject

References

Alignment Data

BLAST Score: 17

E-Value: 4.02082e-14

Q

S

一致性详情

关联文献

反应检索

Reactions: 获得物质参与的反应信息，发现物质的最优合成方法，加速方法的开发。

Structure Match

As Drawn (120)

Substructure (3.7M)

Similarity (0)

Filter Behavior

Filter by Exclude

Search Within Results

Yield

Reaction Scale

Milligram (26)

☒ Gram (7)

No Scale Provided (87)

Reaction Notes

Filtering: Reaction Scale: Gram X

Clear All Filters

7 Results

Group: By Scheme Sort: Relevance View: Expanded

Scheme 1 (1 Reaction)

Steps: 1 Yield: 95%



Suppliers (106)

Suppliers (49)

31-541-CAS-19736284

Steps: 1 Yield: 95%

Reduction of Amides to Amines under Mild Conditions via Catalytic Hydrogenation of Amide Acetals and Imidates

By: Kadyrov, Renat

Advanced Synthesis & Catalysis (2019), 361(1), 185-191

Full Text

1.1 Reagents: Ethyl chloroformate; 3 h, 80 °C

1.2 Reagents: Hydrogen

Catalysts: Platinum

Solvents: Ethanol; 2 h, 40 bar, rt

Experimental Protocols

逆合成路线设计

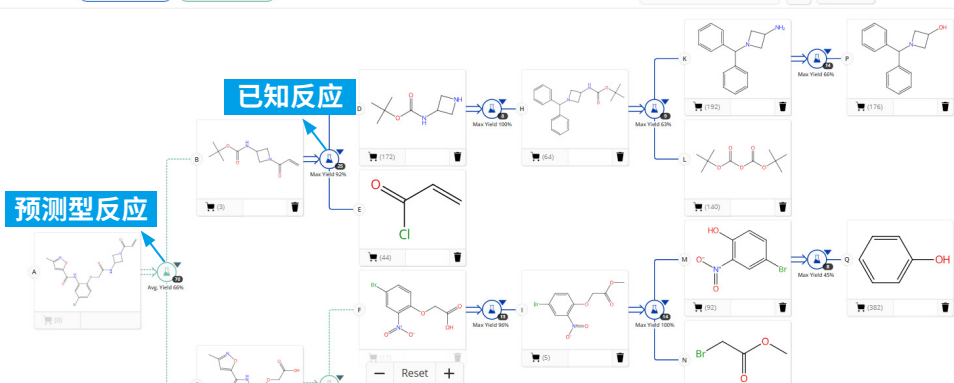
Retrosynthesis: 快速提供最优的逆合成路线，支持获取预测路线，可自主选择替代路线。

Retrosynthesis Plan for drawn structure

Powered by ChemPlanner®

Key Experimental Steps Predicted Steps Edit Plan Options

View Excluded Options Save



合成实验方法详情

Synthetic Methods: 获取可直接用于实验的合成方法，直观展示每一步详细操作信息，节省分析、归纳全文的时间。

Experimental Protocols

Synthetic Methods

Products

1-Butanammonium, N,N,N-tributyl-, (SP-4-3)-bis(cyano-κC)[(3-methyl-1H-imidazol-1-yl-2(3H)-ylidene)-3,2-naphthalenediyl]platinate(1-); (1:1), Yield: 69%

Reactants

Di-μ-chlorobis[(3-methyl-1H-imidazol-1-yl-2(3H)-ylidene)-2,3-naphthalenediyl]diplatinum

Potassium cyanide

Tetrabutylammonium chloride

Reagents

Silver perchlorate

Solvents

Acetonitrile

Methanol

Water

Procedure

- Dissolve AgClO₄ (75 mg, 0.36 mmol) and [Pt₂(μ-Cl)₂(mp)₂] (163 mg, 0.19 mmol) in methanol (30 mL).
- Stir the reaction mixture for 4 hours in the dark.
- Filter the mixture through Celite and evaporate the yellow filtrate to dryness.
- Suspend the resulting yellow solid in methanol (30 mL).
- Add KCN (47 mg, 0.72 mmol) to the mixture.
- Stir the suspension for 2 hours and filter the mixture.
- Evaporate the solution to dryness.
- Suspend the resulting yellow solid in H₂O (30 mL).
- Add n-Bu₄NCl (132 mg, 0.41 mmol) to the mixture.
- Collect the precipitated solid by filtration.
- Recrystallization from methanol/Et₂O to obtain the product.

Transformation

Transmetalation

Coordination of a Metal to Carbon and Heteroatom

Ligand Substitution

Scale

milligram

Characterization Data

1-Butanammonium, N,N,N-tributyl-, (SP-4-3)-bis(cyano-κC)[(3-methyl-1H-imidazol-1-yl-2(3H)-ylidene)-3,2-naphthalenediyl]platinate(1-); (1:1)

Proton NMR Spectrum

(CD₃CN, 270 MHz): δ 8.49 (t, J = 28.6 Hz, 1H), 7.77-7.69 (m, 2H), 7.62 (d, J = 1.9 Hz, 1H), 7.57 (t, J = 5.0 Hz, 1H), 7.34-7.30 (m, 2H), 7.10 (d, J = 1.9 Hz, 1H), 4.12 (s, 3H), 3.09-3.03 (m, 8H), 1.63-1.51 (m, 8H), 1.34 (sext, J = 7.5 Hz, 8H), 0.95 (t, J = 7.3 Hz, 12H).

Elemental Analysis

C₃₂H₄₇N₅Pt: C, 55.16; H, 6.80; N, 10.05%. Found: C, 55.02; H, 6.80; N, 9.96%.

State

pale-yellow crystals

马库什检索

Markush: 利用马库什结构检索快速判断化合物新颖性和创造性, 为化合物可专利性提供支持, 降低侵权风险。

Patent Markush Match

As Drawn (35)

Substructure (825)

Filter Behavior

Filter by Exclude

Patent Office

☐ World Intellectual Property Organization (22)

☐ United States (5)

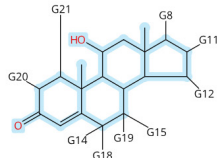
☐ China (4)

35 Results

Sort: Patent Number: Descending

1

WO9710827



Use of antimineralocorticoid compounds against drug withdrawal syndrome

Assignees: Roussel-UCLAF; Petit, Francis; Philibert, Daniel; Goeders, Nick

World Intellectual Property Organization, WO9710827 A1 1997-03-27 |

Language: French, Database: CAPLUS

Patent claim 4

Full Text

There are no notes to display for this structure.

CAS 科学家标引的马库什结构

专利浏览工具

CAS PatentPak: CAS 科学家对专利深度标引, 快速、精准定位专利中的重要物质。

CAS PatentPak

PAGE 238 / 543

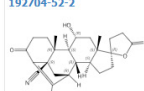
ZOOM

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Key Substances in Patent

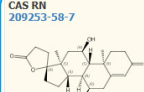
CAS RN 192704-52-2



Analyst Markup Locations (1)

Page 235

CAS RN 209253-58-7



Analyst Markup Locations (2)

Page 236

Page 238

一键定位

WO 98/25948

PCT/US97/23090

236

combined methylene chloride layers were then dried over sodium sulfate to provide 45 g of a solid which was a mixture of 11 α -hydroxycanrenone and the product, 7 α -cyano-11 α ,17-dihydroxy-3-oxo-17 α -pregn-4-ene-21-carboxylic acid, γ -lactone.

5 A sample of the product was analyzed by HPLC (column: 25cm x 4.6mm, 5 μ Altima C₁₈LL); solvent gradient: solvent A = water/trifluoroacetic acid = 99.9/0.1, solvent B = acetonitrile/ trifluoroacetic acid = 99.9/0.1, flow rate = 1.00 mL/minute, gradient = 65:30 (v/v) (A:B--initial), 35:65 (v/v) (A:B--after 20 minutes), 10:90 (v/v) (A:B--after 25 minutes); diode array detector) which revealed a λ_{max} of 238 nm.

10 The reaction mixture was analyzed by HPLC-NMR using the following conditions: HPLC--column: Zorbax RX-

15

追溯早期科学研究

ChemZent®: 最早期的化学文摘——德国化学文摘的英文版, 唯一提供可用英文获取德国化学文摘的解决方案, 将化学研究相关文献回溯至十九世纪初。

28

Ausser dass in der Lymphe mehr Wasser vorhanden ist, als im Blutwasser (hier 922, dort 950 Theile) unterscheiden sich beide Flüssigkeiten noch in dem Verhältnisse der festen Bestandtheile zu den Salzen, welches in der ersten Flüssigkeit wie 88,7 : 11,3, in der letztern wie 91,2 : 8,8 ist. Gerade dieser Umstand ist es wohl, der die viel grössere Klebrigkeit des Serums bedingt, die keineswegs blos von der grössern Concentration der Eiweisslösung abhängig ist. (Simon's Beiträge zur phys. u. pathol. Ch. I. p. 449—457.)

Alkalische Reaction der Borsäure und ihrer Salze, nach HERZOG.

Die Färbung des Curcumapapiers durch Borsäure hängt nach den Versuchen des Verf. von der grösseren oder geringeren Intensität der gelben Farbe dieses Papiers ab, und muss man daher besonders bei vergleichenden Versuchen auf ein völlig egal gefärbtes Papier Rücksicht nehmen.

Die in Wasser gelöste reine Säure verändert die Farbe langsamer und ein wenig schwächer, als die in Alkohol gelöste, und geschieht solches wohl schon deshalb, weil der Alkohol rascher verdun-

CHEMZENT, A CAS SOLUTION

高效获取分析实验详情

CAS Analytical Methods：便捷获取和对比来自权威期刊及专利中的分析方法详情，提高分析化学研究的效率。

Analysis of Bacteria in Air by Microbial cell culture

CAS Method Number

1-103-CAS-263631

Method Category

Air Analysis

Technique

Microbial cell culture

Analyte

Bacteria

Matrix

Air

Material

Circular copper plate electrode (6 and 16 mm in diameter)

Reagent

Sodium chloride

Equipment Used

High voltage supply, 205B-15R, Bertan Associate, Inc., Valhalla, NY

Instructions

Development of the automated electrostatic sampler (AES)
1. Construct a AES sampler consisting of a half-ball shape steel electrode (radius is 45 mm) with three aerosol inlets (radius is 3.5 mm) on the top and a circular copper plate electrode (6 and 16 mm in diameter) suited inside a circular plastic support.
2. Build a plastic cylindrical reservoir (14 mm in diameter and 1 mm in height) with one inlet and one outlet made of copper (2 mm in diameter) above the plate electrode.
3. During the sampler's operation, connect the AES sampler to a high voltage supply (model 205B-15R from Bertan Associate, Inc., Valhalla, NY) and draw the air from three air inlets where a particle charger (two copper sticks and one voltage supply up to 1.5 V) is also equipped.
4. When the electrostatic field is present, collect the airborne particles into the liquid reservoir both by gravitational and electrostatic forces.
5. Deliver the liquids containing the air samples in the reservoir to an antibody-based biosensor through the liquid outlets and a peristaltic pump.
6. Model the electrostatic field distribution between two electrodes using ANSYS software.
7. Operate the AES sampler (central electrode D = 16 mm) with sampling flow rate of 1.2 L/min at the applied sampling voltage of 20 kV.
8. Operate the button aerosol sampler at the sampling flow rate of 5 L/min.
9. Use a 30 min sampling to limit possible overgrowth of the collected microorganisms on 25 mm filter area.
10. Culture the collected air sampling filters directly on Tryptic Soy Agar (TSA) plates at 26 °C for 3 days.
11. For the AES sampler, filter the collected air samples in the reservoir first through a mixed cellulose ester (MCE) filter and then culture directly with the filter on TSA plates at 26 °C for 3 days.
12. During the sampling, add 400 µL of 0.9% NaCl solution into the liquid reservoir.
13. Count the colony forming units (CFUs) manually and calculate the biological collection efficiencies as the total CFU obtained per m³ of air sampled.

Validation

Concentration 250 CFU/m³ (sample data)

分析试剂、材料、介质

操作步骤

数据有效性

实验仪器

制剂 (配方) 检索工具

CAS Formulus：高效获取制剂或配方的工艺、实验评估、目标成分及其常见配伍成分等信息，探索合规要求。同时支持个性化设计配方或制剂。

Curcumin Loaded Oil-in-Water Nanoemulsions: Antifungal Agent or Drug Delivery System

Purpose

Drug delivery systems, Fungicides

Target

Candida albicans, Homo sapiens, Oral candidiasis, Vulvovaginal candidiasis, Wound infection, curcumin, fungal skin infections, skin candidiasis

Delivery Route

Topical drug delivery systems

Physical Form

Emulsions

Source

View

Formulation Ingredients

Curcumin

antimicrobial agent

More Formulations like this...

Terbutaline Sulfate-Tablet: Bronchodilators
Purpose: Bronchodilators
Target: Asthma, Bronchitis, Bronchosp...
Delivery Route: Oral drug delivery syst...
Physical Form: Tablets

Terbutaline Sulfate: Bronchodilators
Purpose: Bronchodilators
Target: Asthma, Bronchitis, Bronchosp...
Delivery Route: Oral drug delivery syst...
Physical Form: Tablets

Terbutaline Sulfate-Tablet: Bronchodilators
Purpose: Bronchodilators
Target: Asthma, Bronchitis, Bronchosp...
Delivery Route: Oral drug delivery syst...
Physical Form: Tablets

Terbutaline Sulfate-Tablet: Bronchodilators
Purpose: Bronchodilators
Target: Asthma, Bronchitis, Bronchosp...
Delivery Route: Oral drug delivery syst...
Physical Form: Tablets

工艺信息

实验评估

Source Journal

Process

N-[(2-(dimethyloxydimino)ethyl)-pentadecanamide and glyceryl monocaprylate were thermostatically maintained in baths at 25 °C, with stirring to equilibrate after step-wise addition of water to obtain oil-in-water nanoemulsion. curcumin solution (dissolved in dimethyl sulfoxide) was then encapsulated into the nanoemulsions to obtain curcumin loaded oil-in-water nanoemulsions.

Experimental Activity

Descriptor	Notes	Details
antifungal activity	the effect of curcumin loaded oil-in-water nanoemulsions on reducing the growth of Candida albicans was assessed against Candida albicans, ATCC 10231 yeast strain.	27 %
cytotoxicity	the effect of curcumin loaded oil-in-water nanoemulsions on in-vitro cytotoxicity was assessed in NHDF cells human skin fibroblasts and the result was based on the cell viability.	the cell viability was diminished and as concentration increased, toxicity at higher doses was observed.
particle size	particle size of the nanoemulsion was assessed via dynamic light scattering using a Zetasizer nano ZS.	85 nm ± 3 nm
polydispersity index	particle size of the nanoemulsion was assessed via dynamic light scattering using a Zetasizer nano ZS.	0.17 ± 0.02
skin penetration efficacy	the effect of curcumin loaded oil-in-water nanoemulsions on ex-vivo skin penetration and interactions with stratum corneum was assessed after 5 h of exposure of pig ear skin, upon encapsulation of the composition with Nile red fluorescent probe.	A better promotion of Nile red penetration into the stratum corneum and its accumulation in the skin was observed.

Source Journal

Role of architecture of N-oxide surfactants in the design of nanoemulsions for Candida skin infection
Colloids and Surfaces, B: Biointerfaces
Language: English
Location: Article Page 1, 2, 3, 4, 5, 7, 10, Table 1, 2
Full Text View in CAS Scifinder



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