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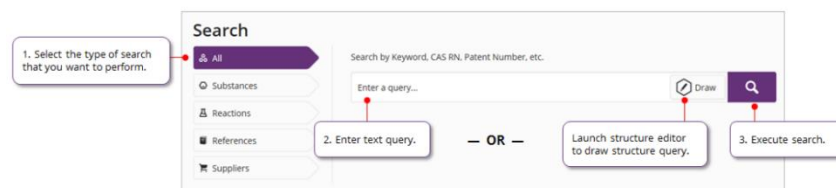
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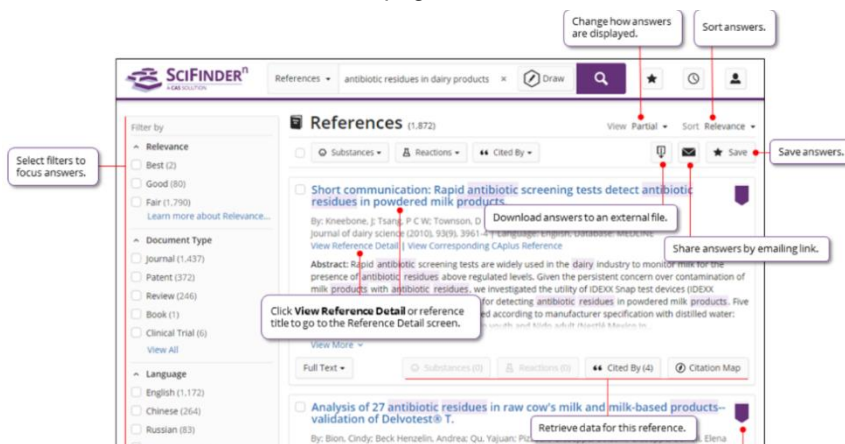
## Getting Started

- **Search:** SciFinder<sup>n</sup> features a new streamlined search interface, including advanced text and structure search functionalities.



- **Reference:** Reference search makes use of the most advanced chemically intelligent algorithm in the world. The display features new visualizations, dynamic facets, and an easy-to-use layout

- **Full Text** acquisition options are available on the reference search page



- **Reference Details:** Selecting a reference title allows you to view record details including bibliographic information, publication history, indexing, graphs, and much more.

**Reference Detail** (5 of 4,015)

Substances (12) Reactions (0) Cited By (1) PATENTPAK Viewer Citation Map

**Patent**

**Patent Information**

Patent Number: WO2015058034  
 Publication Date: 2015-04-23  
 Application Number: WO2014-US61038  
 Application Date: 2014-10-17  
 Kind Code: A1

**Assignee**

The Regents of the University of Colorado, A Body Corporate, United States

**Source**

World Intellectual Property Organization

**Database Information**

AN: 2015099500  
 CAN: 162544597  
 CAPlus

**Language**

English

**Use of tyrosine kinase inhibitor in cancer treatment**

By: Reyland, Mary E.; Wie, Sterc Degregori, James

**Abstract:** The invention provides methods for reducing apoptosis of non-cancerous cells during a cancer treatment and beneficial effects associated with reducing such apoptosis. In particular, methods of the invention comprise administering a tyrosine kinase inhibitor to a cancer patient who is undergoing cancer treatment in order to reduce apoptosis of non-cancerous cells. In another aspect of the invention the tyrosine kinase inhibitor is selected from the group consisting of dasatinib, imatinib, ponatinib, saracatinib, and a combination thereof.

**Graphs:** A, B, C, D showing Saliva Flow Weight vs Days Following Radiation for Control, Dasatinib, and Imatinib groups.

**Patent Family**

Patent	Language	Kind Code	PatentPak Options	Publication Date	Application Number	Application Date
WO2015058034	English	A1	PDF   PDF+   Viewer	2015-04-23	WO2014-US61038	2014-10-17
		P			US2013-61893132P	2013-10-18
US20160228436	English	A1	PDF	2016-08-11	US2016-1515029617	2016-04-14

**Expand to view substances associated with document.**

Substance Role: Pharmacological Activity (7)

- 64319-70-8
- 380643-75-4
- 379231-04-6

Substance Role: Therapeutic Use (7)

- **Substances:** Substance search returns results in an intuitive layout. The display highlights most relevant hits, critical property information, and high resolution images of structures.

**Substances** (6)

Structure Match: As Drawn (1), Similarity (3.437)

Filter by: Commercial Availability, Reaction Role, Reference Role, Number of Components, Substance Class, Molecular Weight

**1219937-98-0**  
 Cyclopropanecarbonyl chloride, 1-[[4-fluorophenyl]amino]carbonyl-  
C1CC1C(=O)N(C(=O)c2ccc(F)cc2)

**1416321-38-4**  
 Cyclopropanecarbonyl chloride, 1-[[3-chloro-4-fluorophenyl]amino]carbonyl-  
C1CC1C(=O)N(C(=O)c2cc(F)cc(Cl)c2)

**Key Physical Properties:** Molecular Weight, Boiling Point (Predicted), Density (Predicted), pKa (Predicted)

- Clicking on **Substance Details** take you to the full detailed records available on SciFinder<sup>n</sup>.

**Reactions:** Reaction Search displays relevant schema as well as key synthetic information.

- Clicking on the **Reaction Details** will allow you to see step-by-step instructions and more detail on the reaction.

Go to Reactions screen.

View previous or next reaction.

Download answers to an external file.

Share answers by emailing link.

Save data.

Click any substance image or name to display substance menu. Use menu options to view substance details (CAS Registry Number), zoom image (magnifier), retrieve associated information (Reactions, Suppliers, References), or copy substance to editor (Edit Substance).

Retrieve suppliers for substance.

View reaction reference on Reference Detail screen.

View full-text PDF for the patent reference or Patent Family members.

Access other full-text options.

Return to All Reaction Schemes

Reaction Detail (Scheme 1, Reaction 2 of 20)

Suppliers (2)

Suppliers (25)

Suppliers (55)

Step 1

Stage	Reagents	Catalysts	Solvents	Conditions
1	Potassium carbonate		Tetrahydrofuran Water	10 min, > 30 °C
2	Water			10 h, 15 - 30 °C

CAS Reaction Number: 31-365-CAS-4160897

Notes: alternative reaction conditions shown

Experimental Protocols

Experimental Procedure

Preparation of N-(4-((6,7-bis(methyloxy)quinolin-4-yl)oxy)phenyl)-N'-(4-fluorophenyl)cyclopropane-1,1-dicarboxamide: The solution from the previous step containing 1-(4-fluorophenyl)carbamoyl-cyclopropanecarbonyl chloride was added to a mixture of 4-(7-dimethoxyquinolin-4-yl)phenylamine (3.0 kg) and potassium carbonate (4.0 kg) in THF (27.0 kg), and water (13.0 kg) at a rate such that the hatch temperature did not exceed 3.0 °C. When the reaction was complete (approximately 10 minutes), water (74.0 kg) was added. The mixture was stirred at 15 to 300 °C for approximately 10 hours, which resulted in the precipitation of the product. The product was recovered by filtration, washed with a pre made solution of THF (11.0 kg) and water (24.0 kg), and dried at approximately 65 °C under vacuum for approximately 12 hours to afford the title compound. Yield (free base, 5.0 kg): <sup>1</sup>H NMR (400 MHz, d<sub>6</sub>-DMSO): δ 10.2 (s, 1H), 10.05 (s, 1H), 8.4 (s, 1H), 7.8 (m, 2H), 7.65 (m, 2H), 7.5 (s, 1H), 7.35 (s, 1H), 7.25 (m, 2H), 7.15 (m, 2H), 6.4 (s, 1H), 4.0 (d, 6H), 1.5 (s, 4H) LC/MS: M+H = 502.

Reference: Method of treating cancer and bone cancer pain  
By: Schwab, Gisela; et al  
World Intellectual Property Organization, WO2012151326 A1 2012-11-08

PATENTPAK - Full Text -

Patent Information  
Patent Number: WO2012151326  
Publication: 2012-11-08  
Application Number: WO2012-1536191  
Application Date: 2012-05-02  
Kind Code: A1  
Assignee: Exelixis, Inc., United States

**History:** SciFinder<sup>n</sup> tracks your searches in a dynamic way, and allows you to quickly find your previous work. You can also easily save and set-up alerts for your searches.

Search history

SciFinder<sup>n</sup> REAG SOLUTIONS

References - Enter a query...

Draw

Search

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Alerts

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Filter by

Search Type

- All (23)
- Substances (542)
- Reactions (258)
- Retrosynthesis (9)
- Suppliers (27)

Date

Start Date: mmm/dd/yyyy to mmm/dd/yyyy

End Date: mmm/dd/yyyy to mmm/dd/yyyy

April, 2018

SU	MO	TU	WE	TH	FR	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

Search History (859)

Saved Searches

April 25, 2018

5:19 PM

References: theory of relativity (1.5M)

Rerun Search

April 24, 2018

4:36 PM

References: Advanced Search (745)

Author: Laird, E.

Rerun Search

April 19, 2018

1:25 PM

Retrosynthesis: Synthetic Depth: 3, Rules Supporting Predictions: Uncommon, Break & Protect Bonds: No

Open Plan

Complete

1:20 PM

Retrosynthesis: Synthetic Depth: 4, Rules Supporting Predictions: Uncommon, Break & Protect Bonds: No

Open Plan

Complete

April 17, 2018

1:16 PM

For questions, please visit <https://www.cas.org/products/scifinder-n>