CAS SCIENTIFIC PATENT EXPLORER™

QUICK START GUIDE

CAS
A division of the
American Chemical Society

CAS SCIENTIFIC PATENT EXPLORER™

BETWEEN IDEAS AND INNOVATION THERE IS EXPLORATION

Find the connections that matter with an easy-to-use IP solution

Beyond world-renowned CAS chemistry

CAS Scientific Patent Explorer offers a unique combination of a much broader scientific exploration space, exhaustive patent coverage, and powerful visualization

- More than 140 million records from 122 patent jurisdictions
- Over 75 million CAS human-indexed substances
- An efficient experience, combining patent and chemical searching
- An easy-to-use tool for both patent professionals and scientists alike

Gain foresight into the rapidly changing world of IP

- Leverage proprietary search and relevance algorithms for better results
- Visualize and analyze chemical patent content to gain insight into IP trends
- Review full text patents side-by-side with abstracts, claims, and descriptions texts for a complete and efficient review

How to log in to CAS Scientific Patent Explorer

Log in at **cas.org/cas-solutions-login**

If you have access to CAS SciFinder^{n} or CAS Chemical Compliance Index™, you can use the same username and password for CAS Scientific Patent Explorer. Otherwise, a new username will be provided.

Search

Substance search

Search for substances and then view relevant patents for the results.

There are two types of substance searches available in CAS Scientific Patent Explorer, each with different advantages in various scenarios.

Structure search

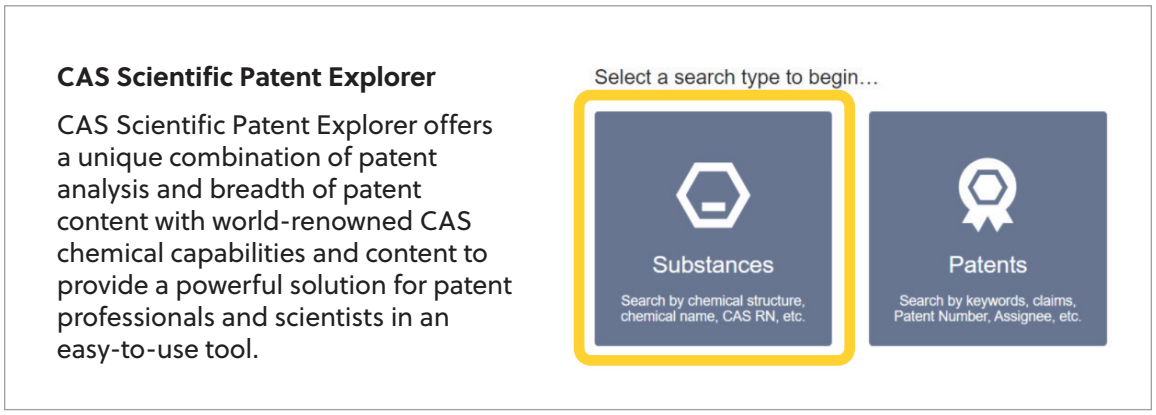
Retrieve substances that match, include, or are similar to the structure you draw/import.

Text search

Find substances that match your query, which can include substance names, CAS Registry Numbers®, document identifiers, and Boolean search logic.

Substance search by structure

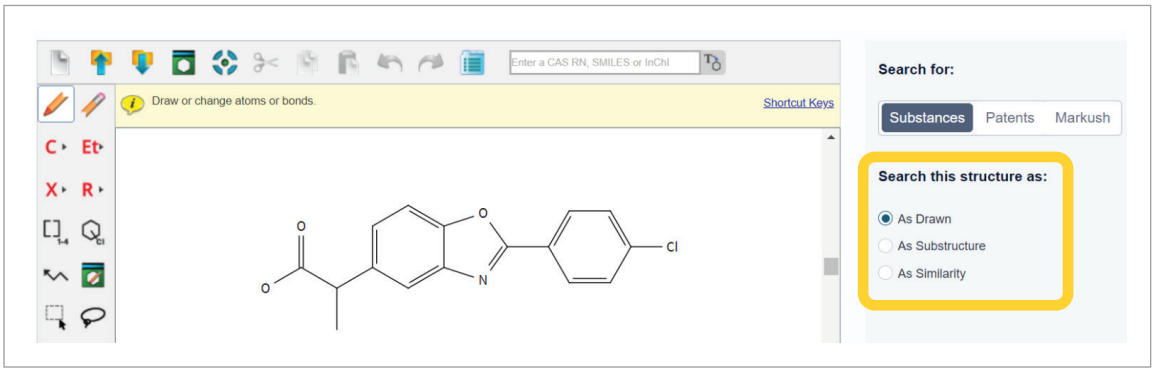
1. Click the **Substances** tile.



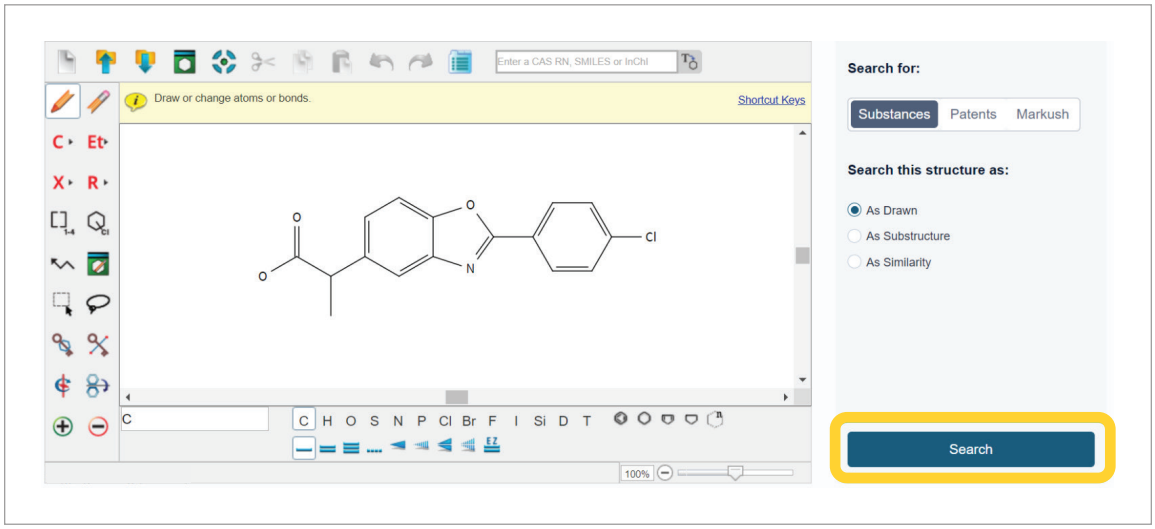
2. Draw a new structure or import an existing file.

3. Select the option to retrieve substances that include the structure you draw as a complete structure or as a substructure, or that are similar to your structure.

   Note: You can apply **substructure query features** to narrow or broaden the search for the substructures embedded in the substances matched.

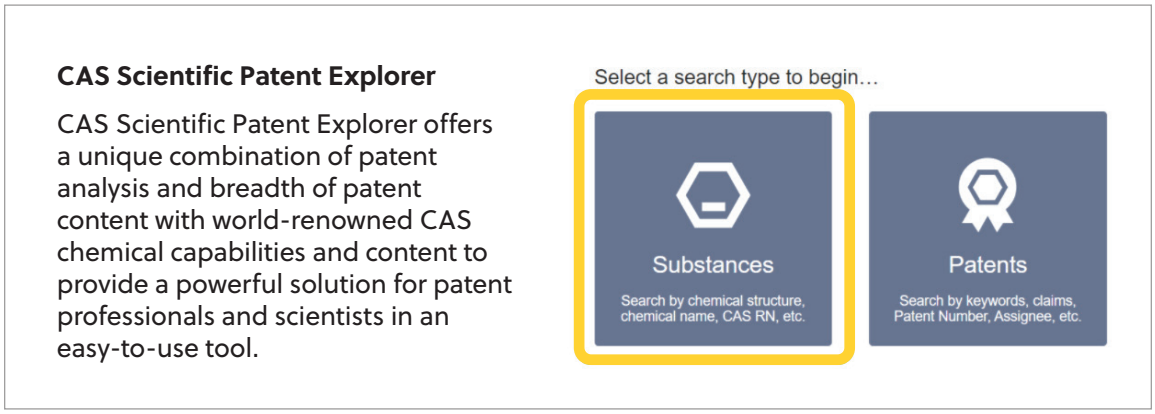


4. Click the Search button to submit the query and view the results.

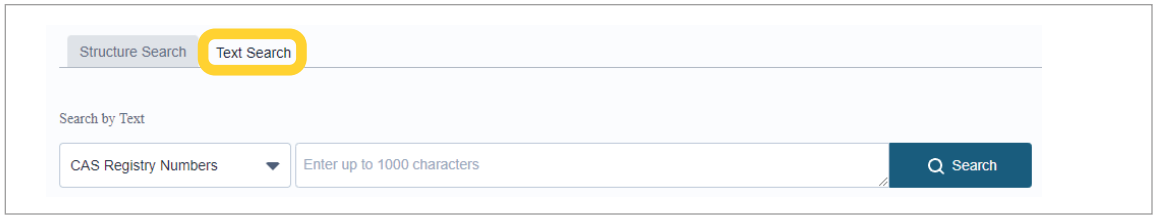


Substance search by text

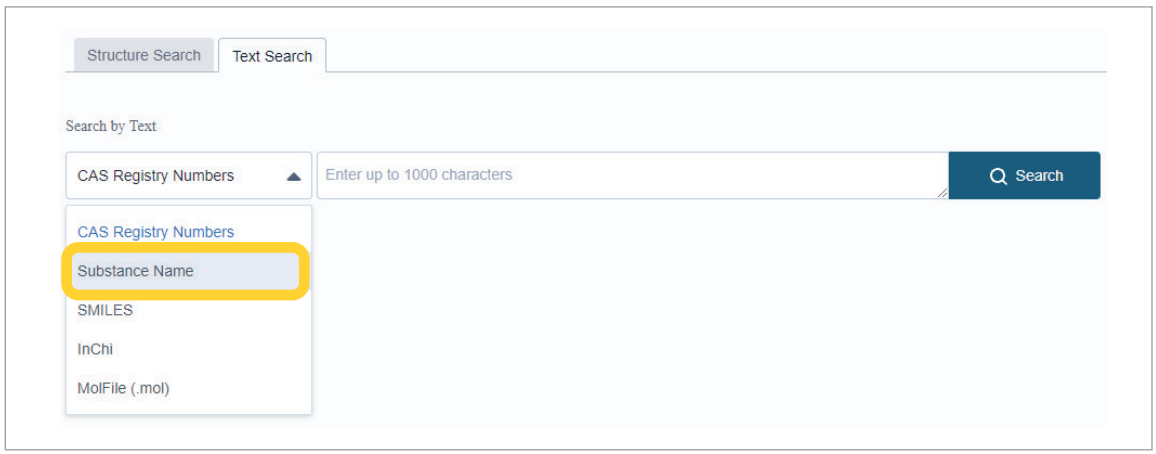
1. Click the **Substances** tile.

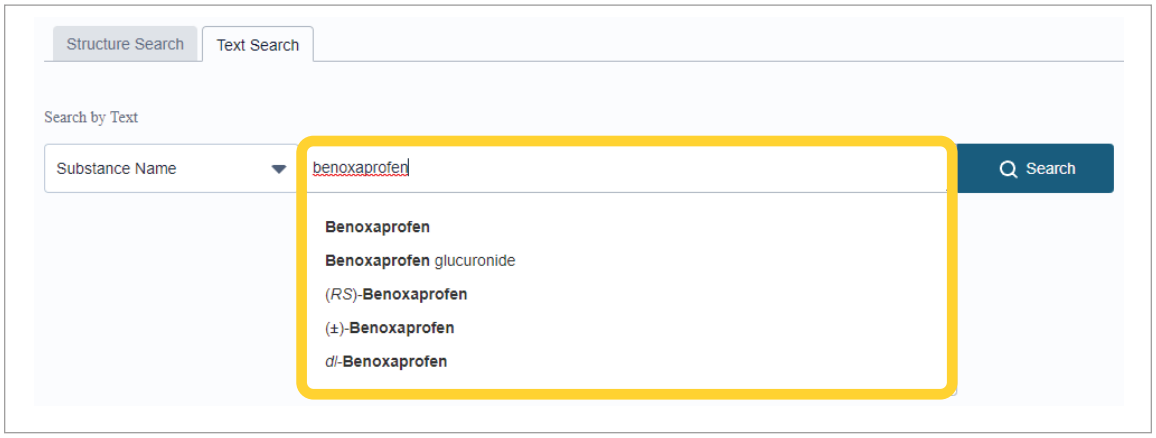


2. Click the **Text Search** tab.



3. Click under **Search by Text** to expand the menu and then select the search text type.





4. Enter your search term. As you enter the text, auto suggestions may appear. You can select from the list of suggestions or continue typing.

   Note: You may enter multiple search terms separated by a space, as well as Boolean logic. The search field has a 1,000-character limit.

5. Click the **Search** button to submit the query and view the results.

Patent search

There are multiple types of patent searches available in CAS Scientific Patent Explorer, each with different advantages in various scenarios.

Simple

Contrary to its name, Simple search tends to be used by our most advanced users. It consists of a search bar for text searches with Boolean logic.

Advanced

With Advanced search, you can define exactly what you want to find. It is possible to create a query piece by piece, selecting the different fields that your keywords are going to be searched in and the operators that will help you make your query as specific as you need it to be. It allows for the most control over exactly what comes back in your search.

Chemical

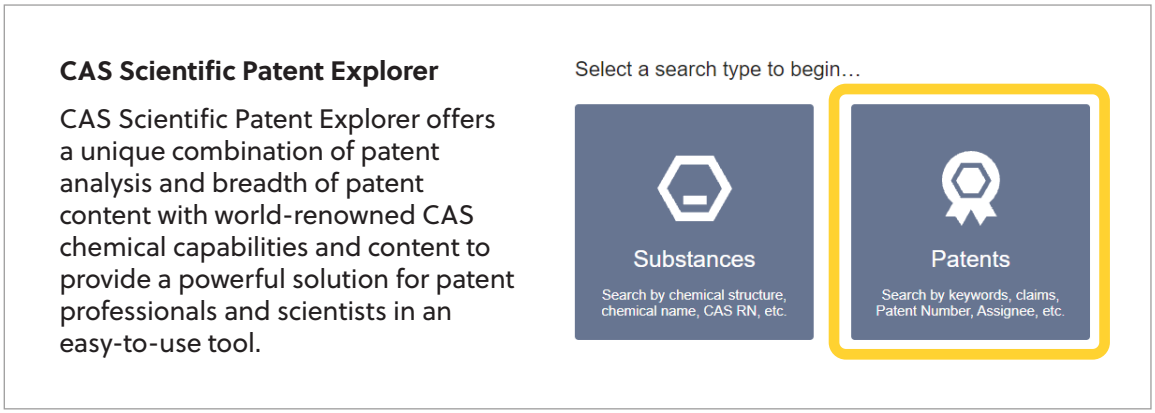
Chemical search enables you to jump from structure searches to related patents and back again in one seamless workflow. You may also search by Markush structure.

Markush

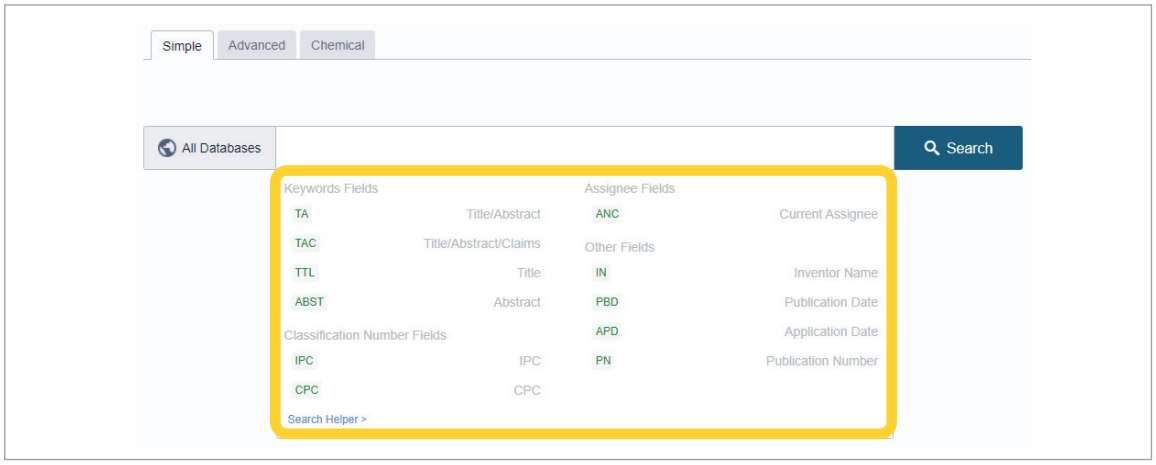
Use a Markush search to find patents that contain structures (including generic structures) matching the structure query. The inventory may not have tested or prepared all members of the family, but can make a chemically plausible claim of equivalence via a Markush structure.

Simple patent search

1. Click the **Patents** tile.

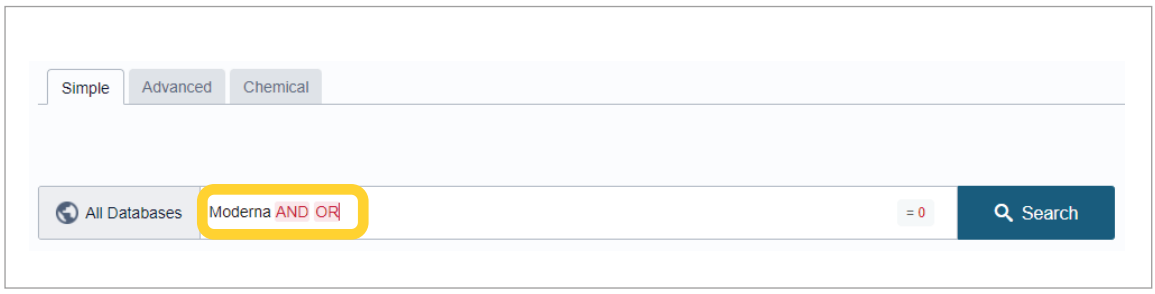


2. Click the search field to reveal field code shortcuts.

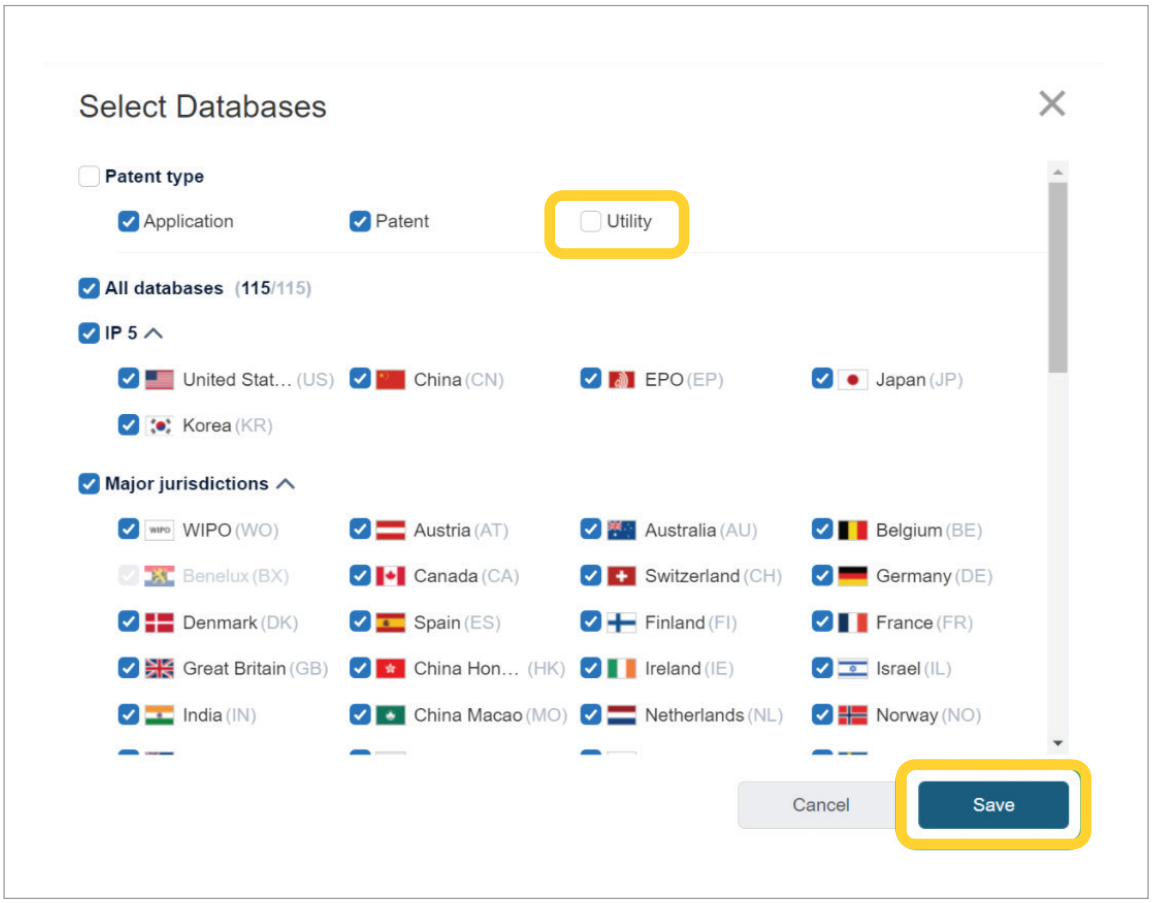


Enter your search terms, which may be keywords, company names, patent information, and inventors.

Note: You may enter multiple search terms separated by a space, as well as Boolean logic. The search field has a 1,500-character limit. As you enter text, CAS Scientific Patent Explorer validates query syntax and errors appear in red.



All patent types, databases, and major jurisdictions are selected by default. To edit, click the **All Databases** button, uncheck the appropriate box(es), and then click the **Save** button.

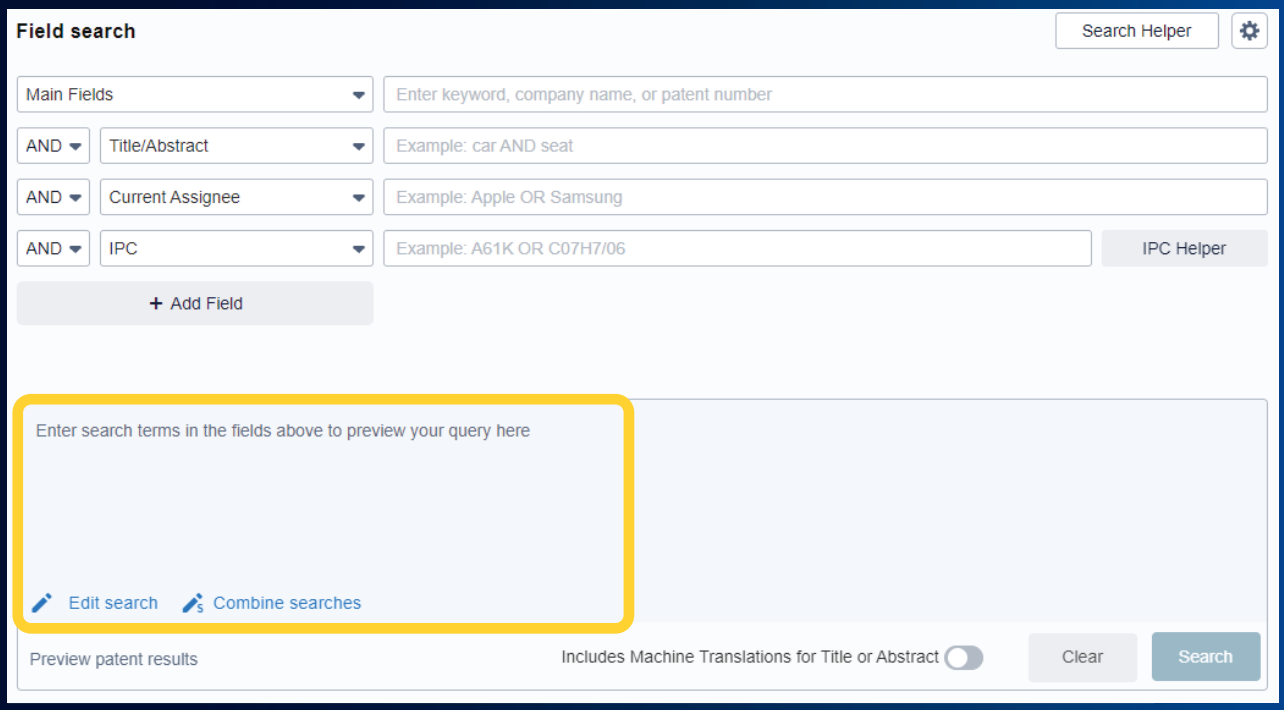


If you deselect any databases and save, a red dot appears next to **All Databases** as a reminder that not all are selected.

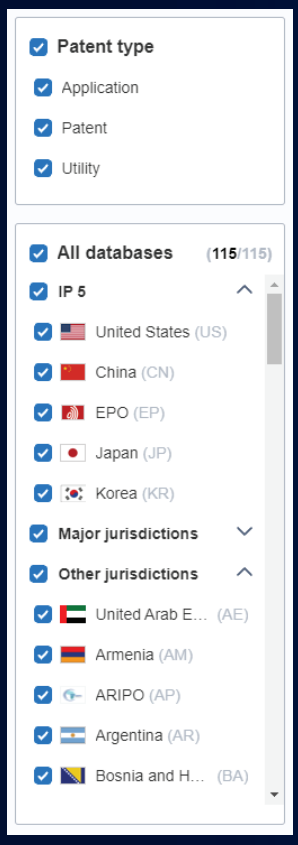
3. After you've finished crafting your query, a result number preview appears. Click the **Search** button to view the results.

Advanced patent search

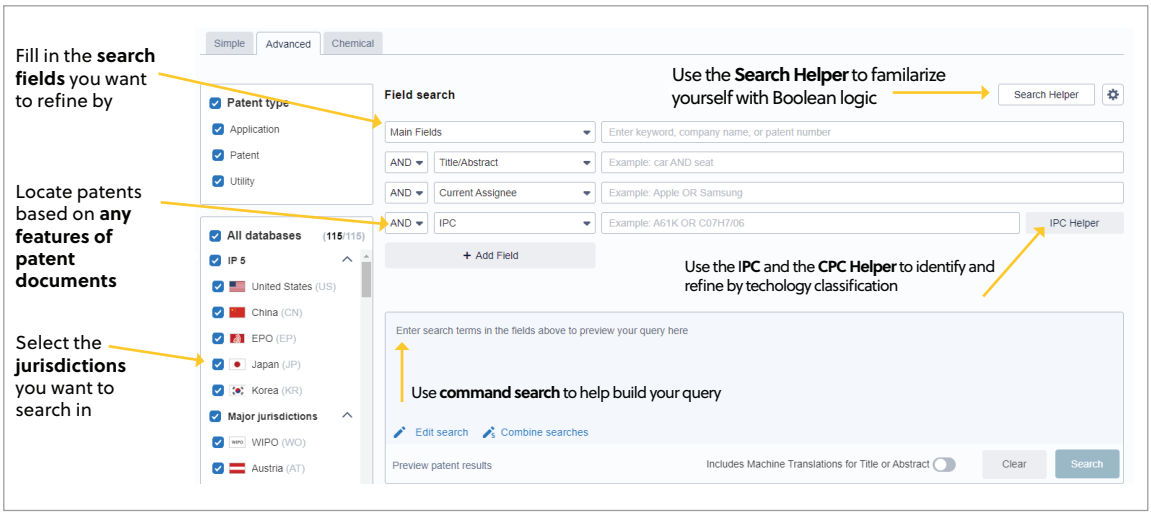
At the bottom, you'll find a text box in which you can see how your query is coming along.



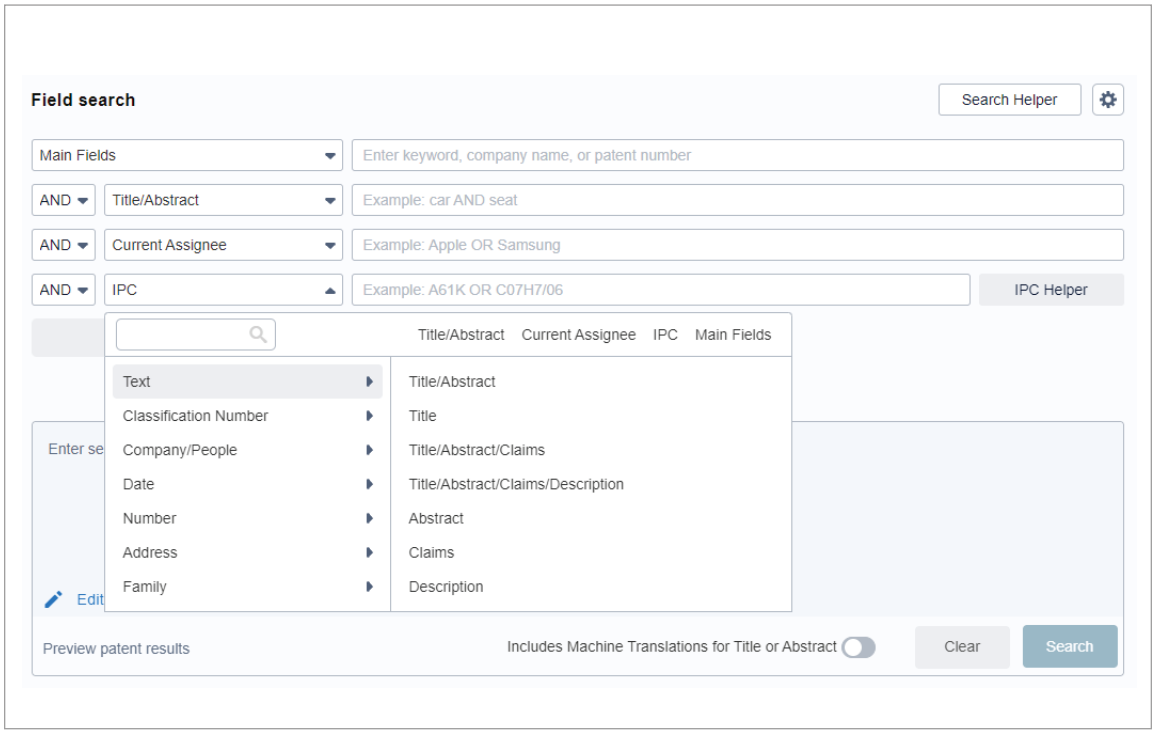
And on the left side of the screen, there is a refinement tool that will allow you to select the patent types and jurisdictions that you want to include in your search.



You'll notice that Advanced search is made up of different sections.

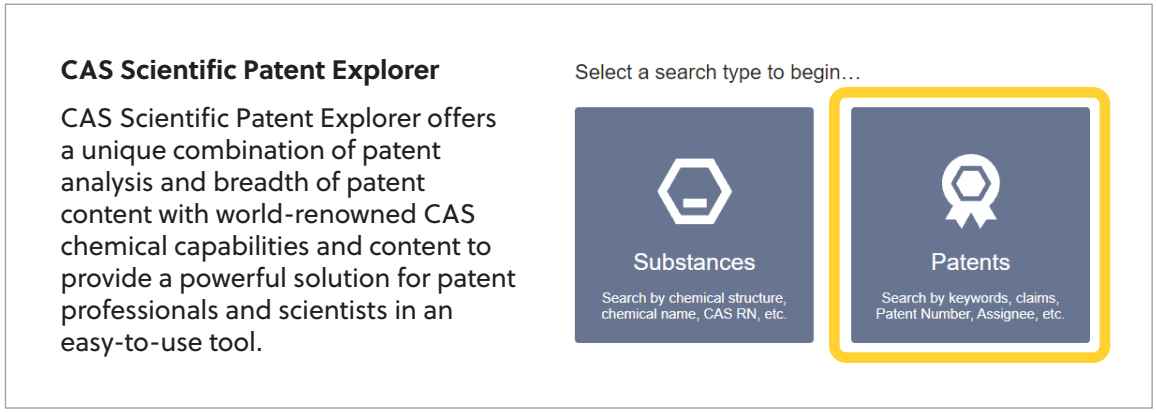


Refine your query by choosing fields and operators from the drop-down menus and by adding keywords in the text boxes.



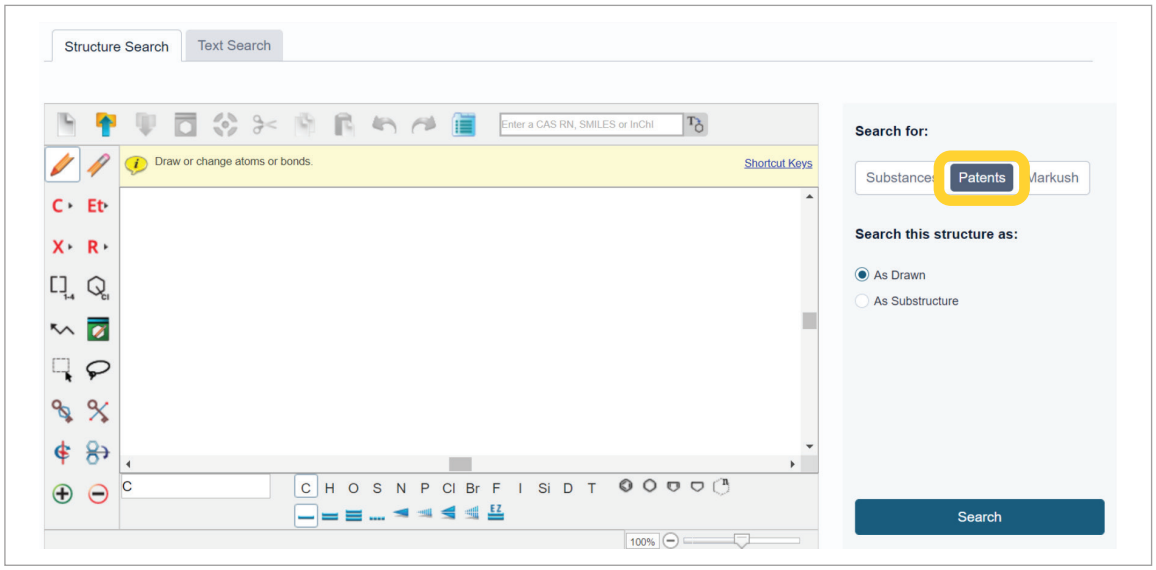
Chemical structure patent search

1. Click the **Patents** tile.

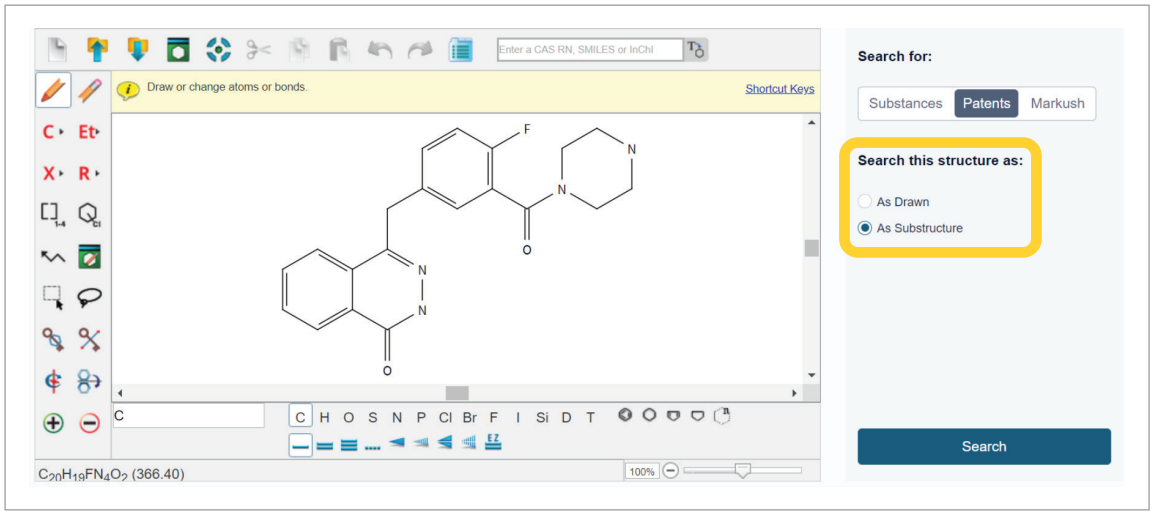


2. Click the **Chemical** tab.

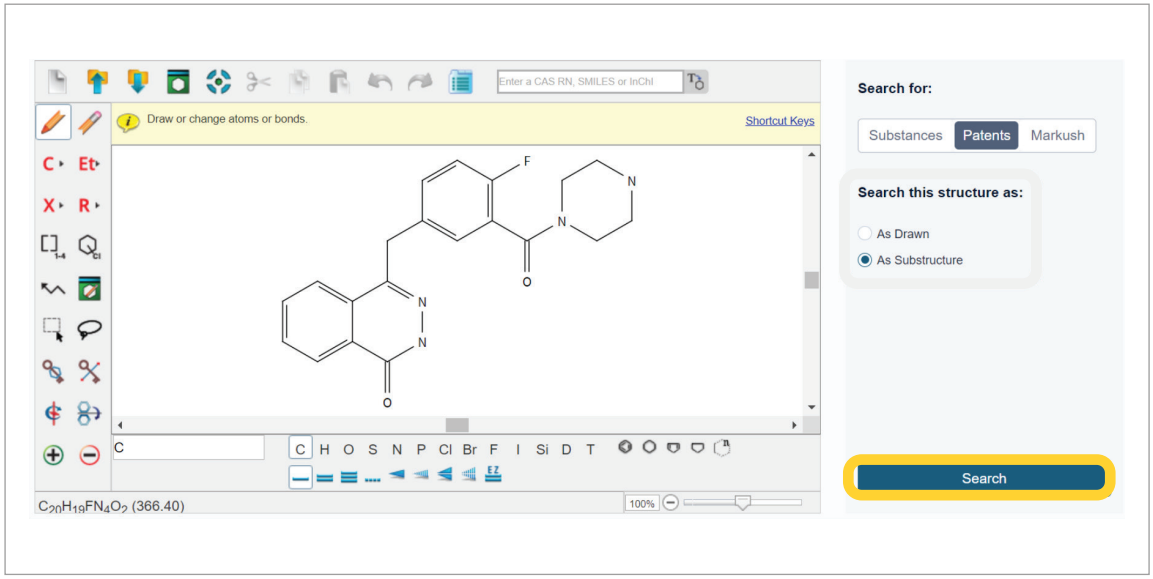
3. Click **Patents** under **Search for.**



4. Draw a new structure or import an existing file.
5. Select whether to search the structure **As Drawn** or **As a Substructure** within a molecule.



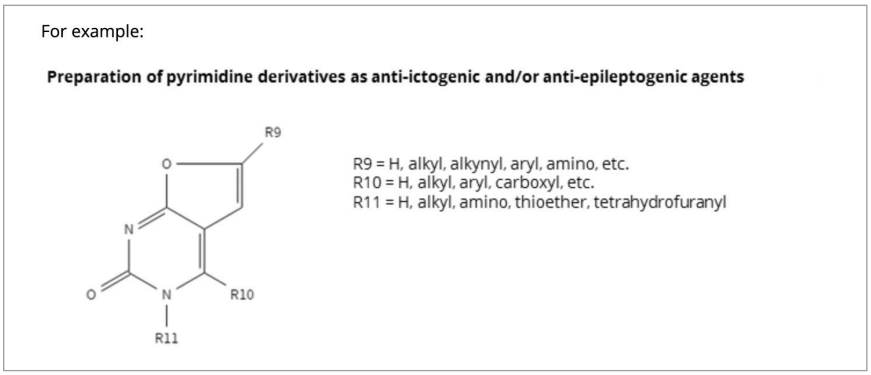
6. Click the **Search** button to view the results.



Note: To conduct a Markush search for patents that contain generic structures that match the structure query, select **Markush** under **Search for**.

Markush structure patent search

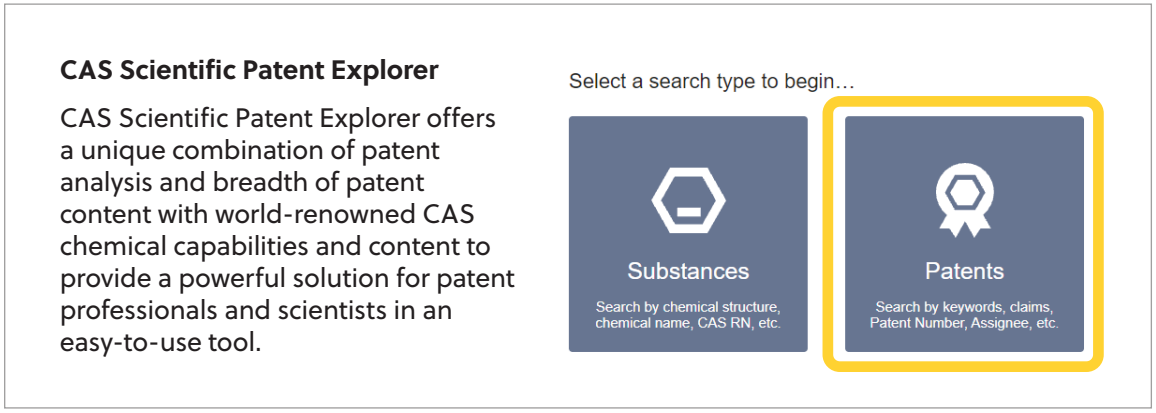
Use a Markush search to find patents that contain structures (including generic structures) matching the structure query.



The inventor may not have tested or prepared all members of the family, but can make a chemically-plausible claim of equivalence via a Markush structure.

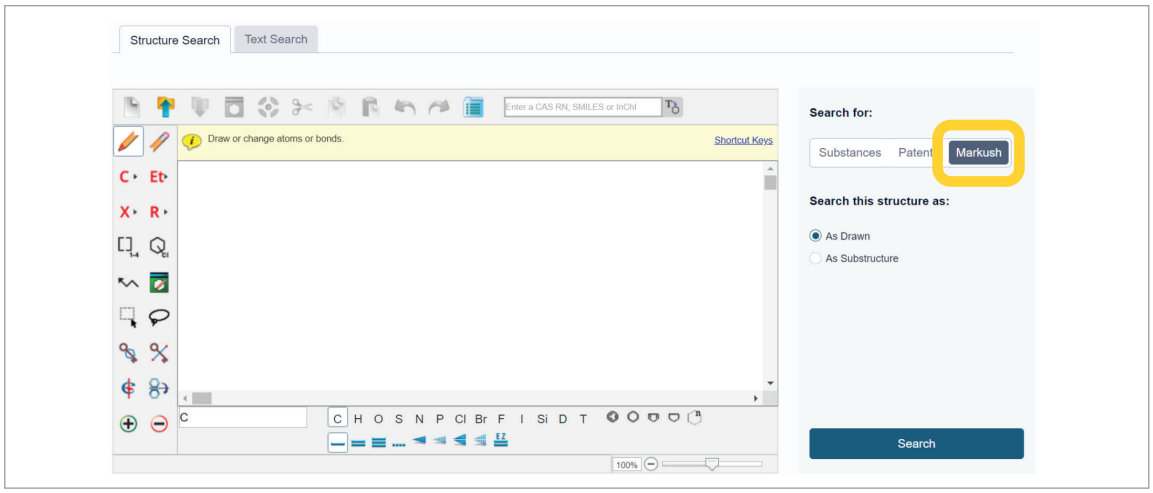
To conduct a Markush structure patent search:

1. Click the **Patents** tile.

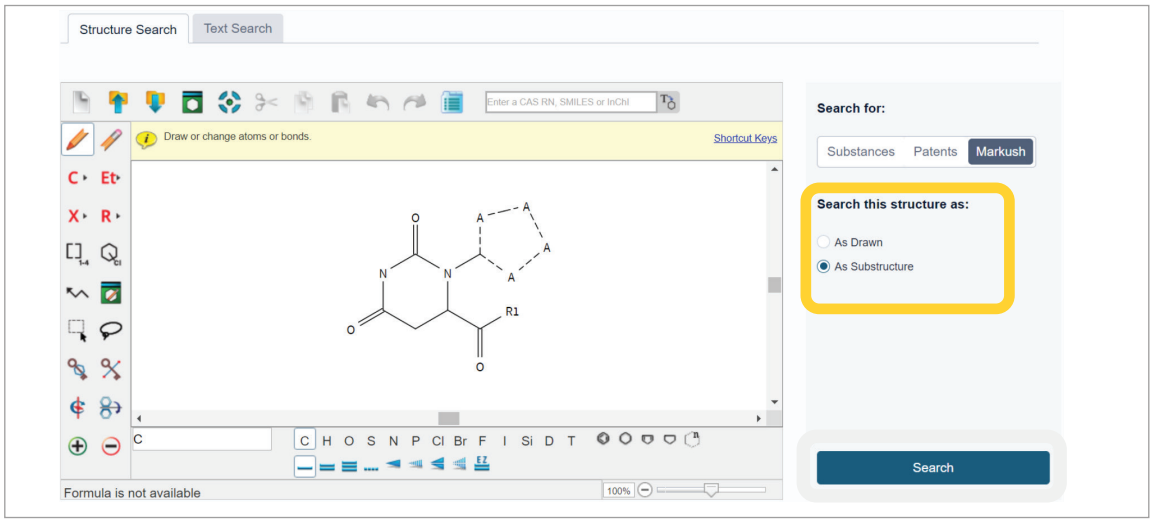


2. Click the **Chemical** tab.

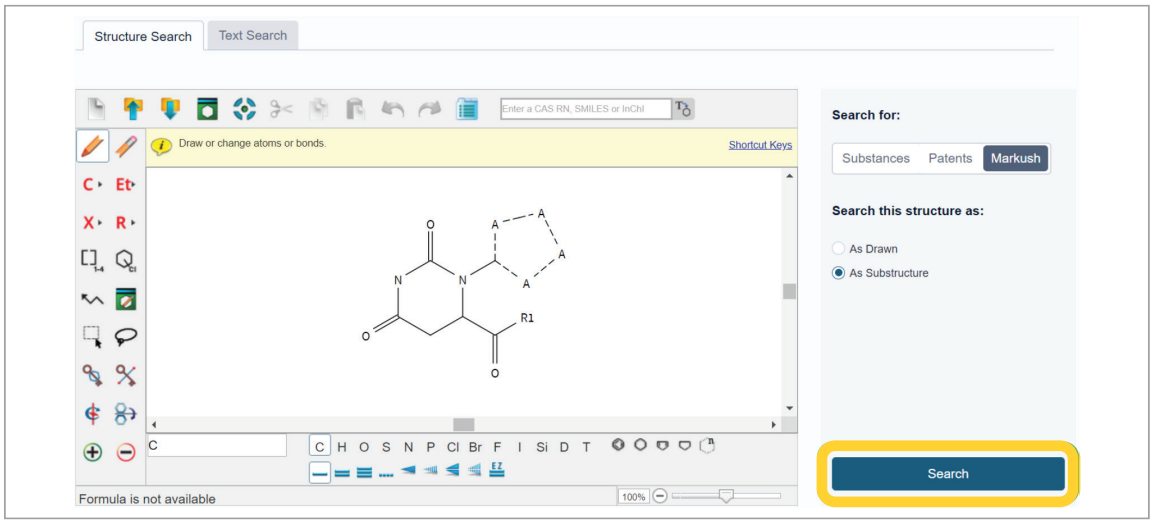
3. Click **Markush** under **Search for.**



4. Draw a new structure or import an existing file.
5. Select whether to search the structure **As Drawn** or **As a Substructure** within a molecule.



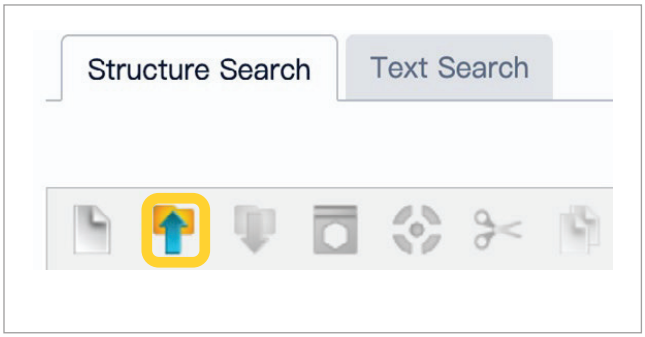
6. Click the **Search** button to view the results.



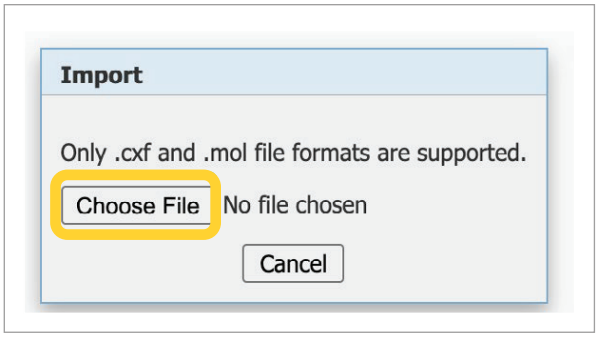
Import a structure

Note: You may also import a .mol file from ChemDraw.

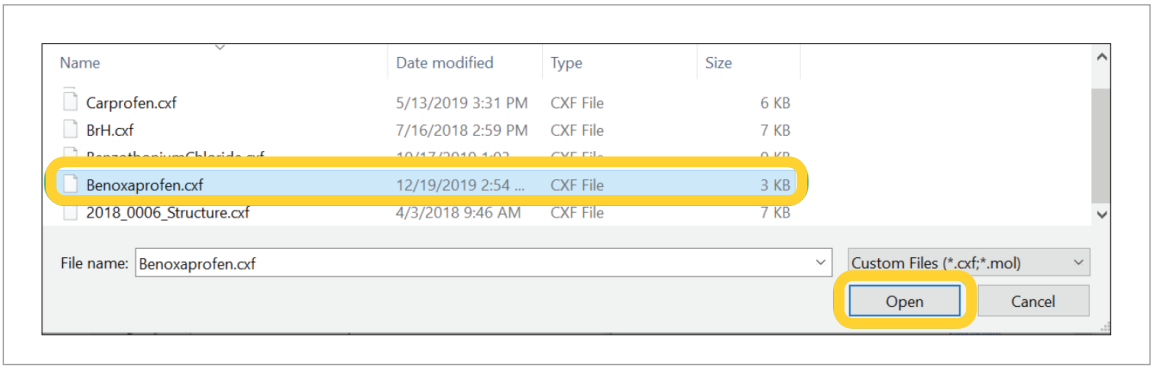
1. Click the **Import** icon.



2. Click the **Choose File** button.



3. Select the structure file to import, and then click the **Open** button.



Explore results

Substance results

Edit structure

Click **Edit Query** to go back to the drawing tool and edit the query structure.

Analyze results

Click **Analyze** to view data graphs based on the patents using the substances.

View ChemScape

Click **ChemScape** to view a three dimensional, graphic model of the results in relation to the queried substance.

View patents

Click the **View Patents** button with no results selected to view all patent results associated with the result set.

View substance detail

Click the **CAS Registry Number** to view more information on the substance's detail page.

View substance information

Click the structure image to open the substance window.

Filter results

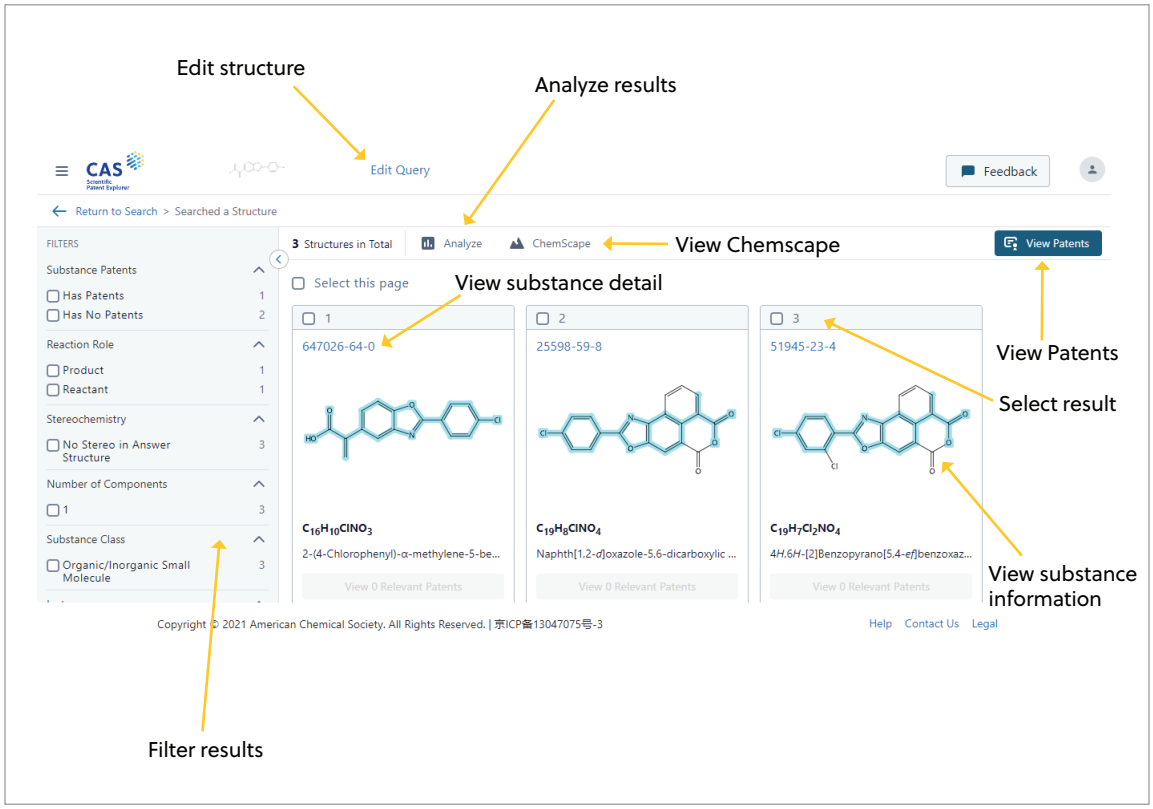
Select **filters** to refine the result set.

Select result

Check one or more result's box to select it for viewing relevant patents.

View selected patents

Click **View Relevant Patents** to view the patents for the selected results only.


Edit structure
Analyze results
CAS
Edit Query
Feedback
Return to Search > Searched a Structure
FILTERS
Substance Patents
Has Patents 1
Has No Patents 2
Reaction Role
Product 1
Reactant 1
Stereochemistry
No Stereo in Answer Structure 3
Number of Components
1 3
Substance Class
Organic/Inorganic Small Molecule 3
3 Structures in Total
Analyze
ChemScape
View Chemscape
View Patents
Select this page
View substance detail
1
647026-64-0
$C_{16}H_{10}ClNO_3$
2-(4-Chlorophenyl)-α-methylene-5-be...
View 0 Relevant Patents
2
25598-59-8
$C_{19}H_8ClNO_4$
Naphth[1,2-d]oxazole-5,6-dicarboxylic ...
View 0 Relevant Patents
3
51945-23-4
$C_{19}H_7Cl_2NO_4$
4H,6H-[2]Benzopyrano[5,4-ef]benzoxaz...
View 0 Relevant Patents
View Patents
Select result
View substance information
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Filter results

Patent results

Filter results

Select filters and enter keywords to refine the result set.

Change result view

Select **Table** or **Flip-it**.

Analyze results

Click **analyze** to view data graphs based on the patents.

Export results

Export results in .xls, .pdf, Word (.doc), .xml, or .csv format.

Change result ordering

Order results by application date, application number, publication date, or publication number.

Edit view settings

Customize your search results display.

Select result

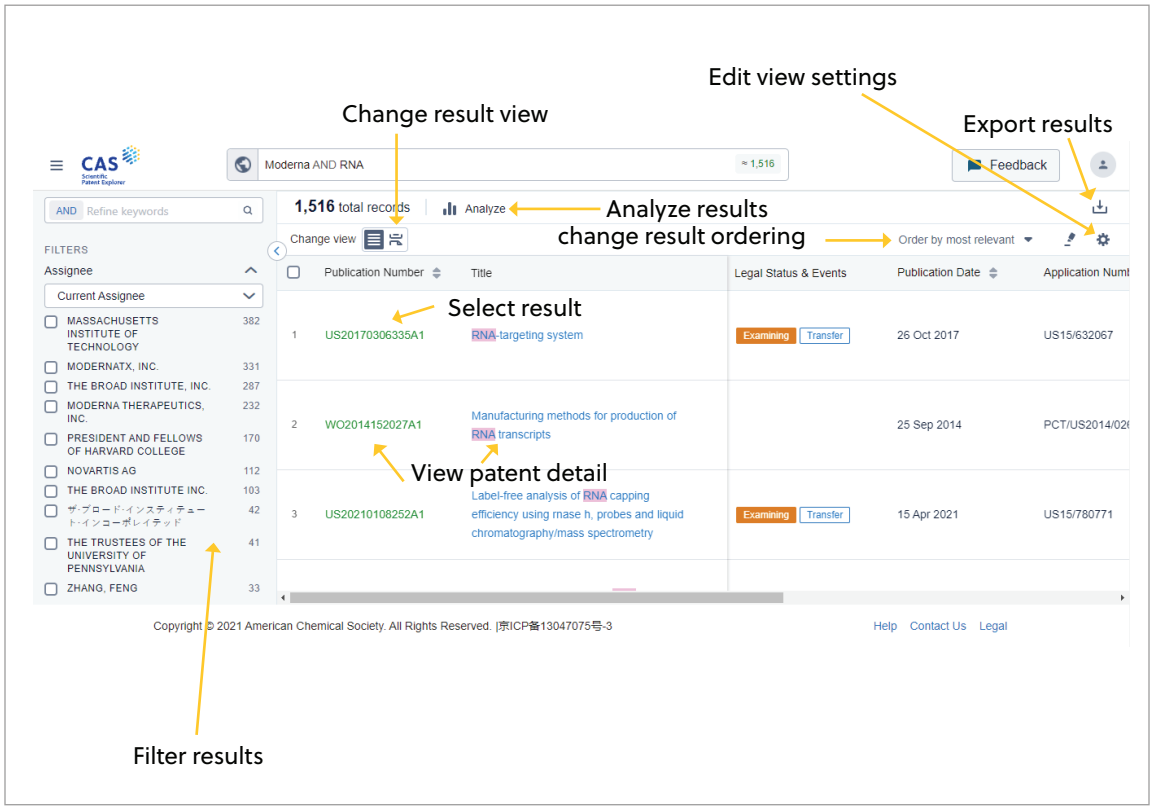
Hover your mouse over the number and then check the box that appears to select a result.

Select result

Check the result box to select it for viewing relevant patents.

View patent detail

Click **View Relevant Patents** to view the patents for the selected results only.


Edit view settings
Change result view
Export results
Moderna AND RNA
≈ 1,516
Feedback
AND Refine keywords
1,516 total records
Analyze
Analyze results
change result ordering
Change view
Order by most relevant
FILTERS
Assignee
Current Assignee
MASSACHUSETTS INSTITUTE OF TECHNOLOGY 382
MODERNATX, INC. 331
THE BROAD INSTITUTE, INC. 287
MODERNA THERAPEUTICS, INC. 232
PRESIDENT AND FELLOWS OF HARVARD COLLEGE 170
NOVARTIS AG 112
THE BROAD INSTITUTE INC. 103
ザ・ブロード・インスティテュート・インコーポレイテッド 42
THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA 41
ZHANG, FENG 33
Publication Number
Title
Legal Status & Events
Publication Date
Application Numb
Select result
1 US20170306335A1 RNA-targeting system Examining Transfer 26 Oct 2017 US15/632067
2 WO2014152027A1 Manufacturing methods for production of RNA transcripts 25 Sep 2014 PCT/US2014/02
View patent detail
3 US20210108252A1 Label-free analysis of RNA capping efficiency using rnase h, probes and liquid chromatography/mass spectrometry Examining Transfer 15 Apr 2021 US15/780771
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Help Contact Us Legal
Filter results

Markush results

Edit structure

Click **Edit Query** to go back to the drawing tool and edit the query structure.

View patents

Click the **View Patents** button with no results selected to view all patent results associated with the result set.

View patent detail

Click the patent number to view the associated patent's detail.

Filter results

Select a Patent Office to refine the result set.

Select result

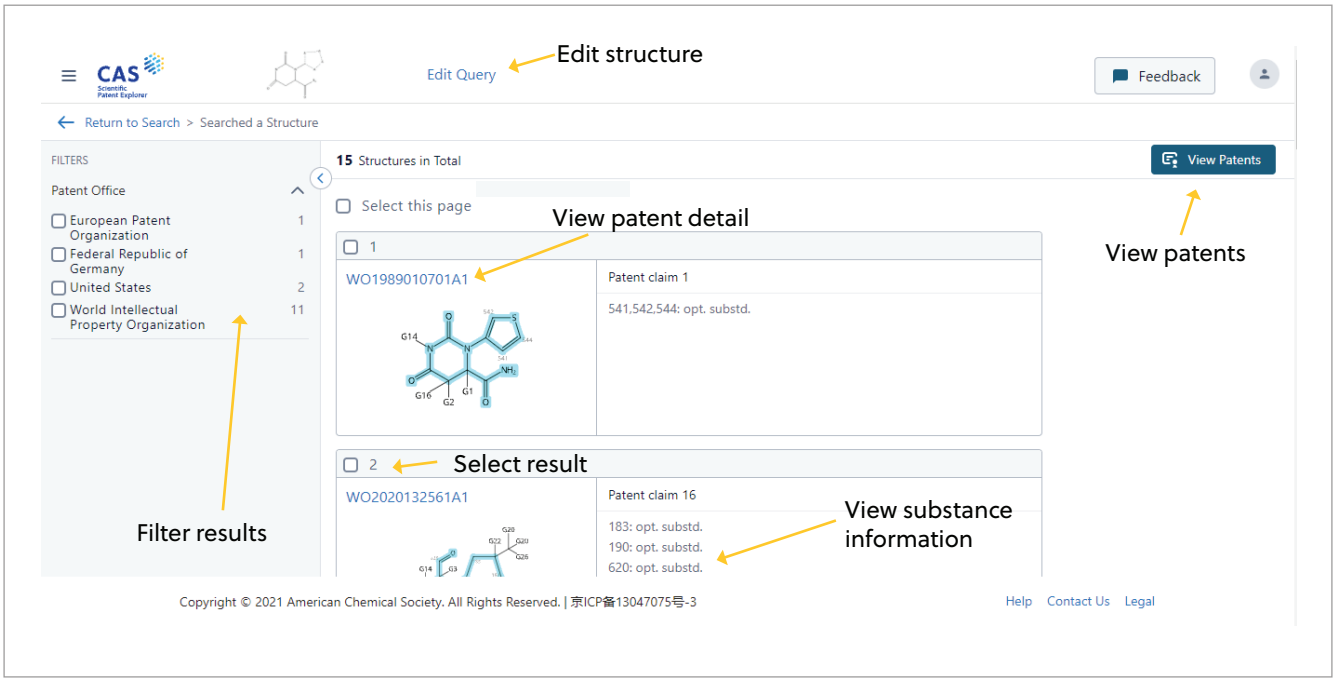
Check one or more result's box to select it for viewing relevant patents.

View substance information

Click the structure image to open the substance window.

View selected patents

Click **View Relevant Patents** to view the patents for the selected results only.


Edit Query
Edit structure
Feedback
Return to Search > Searched a Structure
FILTERS
Patent Office
European Patent Organization 1
Federal Republic of Germany 1
United States 2
World Intellectual Property Organization 11
15 Structures in Total
View Patents
Select this page
View patent detail
1
WO1989010701A1
Patent claim 1
541,542,544: opt. substd.
2
Select result
WO2020132561A1
Patent claim 16
183: opt. substd.
190: opt. substd.
620: opt. substd.
View substance information
View patents
Filter results
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