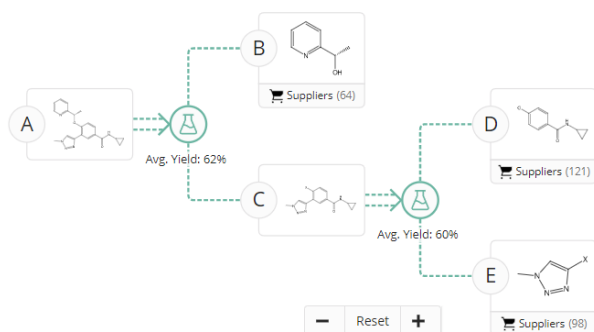


The main benefits of SciFinder-n as well as the last updates

- 1) The **smartest relevance engine** in the industry will ensure you don't waste time. SciFinder-n doesn't just "retrieve" results, it shows you the best place to start
- 2) **Retrosynthesis:** for new or known molecules, SciFinder-n will perform a full retrosynthetic analysis.



- 3) **New content:** Additional experimental procedures from Elsevier, Wiley, Royal Soc. Chem. Journals (MethodsNow-Synthesis)
 - Step-by-step synthetic procedures, extracted and summarized.

Experimental Protocols

MethodsNow™	
Products	(3 <i>R</i> ,3 <i>a</i> 5,6 <i>aR</i>)-Hexahydrofuro[2,3- <i>b</i>]furan-3-ol, Yield: 34%
Reactants	L-threo-Pentaric acid, 2,3-dideoxy-3-(4-morpholinylcarbonyl)-, 1,4-lactone, 5-ethyl ester
Reagents	Lithium aluminum hydride Sulfuric acid Sodium hydroxide
Solvents	Tetrahydrofuran Water
Procedure	<ol style="list-style-type: none"> 1. Add a solution of 1.0M LAH (303 mL, 303 mmol) in THF to ethyl (2<i>R</i>,3<i>S</i>)-3-(morpholine-4-carbonyl)-5-oxotetra-hydrofuran-2-carboxylate (22.15 g) in dry THF (230 mL) over 75 minutes at -10 to 3 °C. 2. Warm the reaction to room temperature. 3. Stir the reaction mixture for 16 hours. 4. Cool the reaction mixture to -8 °C. 5. Treat the mixture with 1.0M sulfuric acid (910 mL, 910 mmol) over 2 hours at 5 °C. 6. Upon complete addition of sulfuric acid, quench the pH of the solution 1.3 (by pH paper).

- 4) Get actionable results faster with a streamlined interface
 - Search all reactions, substances and references at once
 - Possibility to combine a reference search with the structure one.

The screenshot shows the SciFinder interface. At the top, there is a search bar with the text 'markers for breast cancer'. Below the search bar, there are buttons for 'References', 'Edit', and a search icon. On the left, there is a 'Filter by' sidebar with options for 'Document Type' and 'Substance Role'. The main content area shows a search result for 'Expression of estrogen-related gene markers in inhibitor responsiveness' by Moy, Irene; Lin, Zhihong; Rademaker, Alfred W.; Reierstad, S. The abstract mentions 'Aromatase inhibitors (AIs) are the most effective class of drugs in treatment response rate. Our objective was to determine whether...'. On the right, there is a chemical structure drawing tool with a 'Rerun Search' button and an 'Edit Search' button.

- 5) **Living history** lets you rerun or edit past searches with a single click. You can also easily save and set-up alerts for your searches. You can also follow different ideas in many tabs.

🕒 Search History (1,076)

The screenshot shows the Search History interface. At the top, there is a search history entry for 'March 29, 2021' at '4:00 PM'. The entry is categorized under 'Substances' and shows search results for 'As Drawn (0)', 'Substructure (0)', and 'Similarity (1,009)'. There is a chemical structure drawing tool and buttons for 'Rerun Search' and 'Edit Search'.

- 6) Autosuggest, natural language, exact phrase, wildcard truncation, and Boolean functions for precision searching

- 7) Go straight to the chemistry in patents <https://www.cas.org/products/patentpak>
- **Patent chemistry** is fully annotated with structures, nomenclature and more
 - CAS expert scientists have identified chemistry locations, so SciFinder-n reveals what patents usually obscure.

The screenshot shows the PatentPak interface. At the top, there are navigation controls: 'PAGE' (143 / 201), 'ZOOM' (minus and plus buttons), and 'DOWNLOAD' (PDF and PDF+ buttons). The main content area displays a patent entry with the following text:

38. A method of identifying a SARM1 NADase inhibitor, comprising:

- providing a mixture comprising i) a mutant or fragment of SARM1, ii) NAD⁺ and iii) a candidate inhibitor, wherein the mutant or fragment has constitutive NADase activity;
- incubating the mixture;
- quantifying NAD⁺ and ADPR in the mixture after the incubating;

On the left side, there is a sidebar titled 'Key Substances in Patent' which shows 'CAS RN 53-84-9' and a chemical structure. Below the structure, it says 'Analyst Markup Locations (1)' and 'Page 143'.

- 8) Possibility to filter our publications which reported **analytical methods** and **formulations** in different industries.
- 9) **Chemscape Analysis**. It will help you to visualize the similarity and patent landscape for a set of substance results.
- 10) There are three **Biosequence search** types available in SciFinder-n **BLAST (Basic Local Alignment Search Tool)**, **CDR (Complementarity-Determining Region)** and **Motif** searches.
Here is a link to our help with more information
https://scifinder-n.cas.org/help/Searching_in_SciFinder-n/Biosequence_Search/Biosequence_Search.htm
- 11) **Bioscape Analysis**. It visualizes the similarity and patent landscape for a set of sequence results.
- 12) Possibility to **Exclude Filters**. This feature allows users to exclude results based on filters.