Your SciFinder^n team

Team contact:
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A CAS SOLUTION

Biochemistry Searching in SciFinder^n

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Search Question

- Look for publications dicussing the biosynthetic preparation of vanillin and close derivatives by Streptomyces bacteria
- Identify a typical starting material and investigate its possible biosyntheses including reaction pathways and used bacteria

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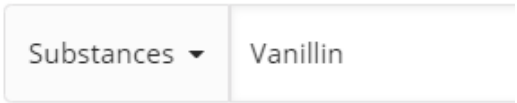
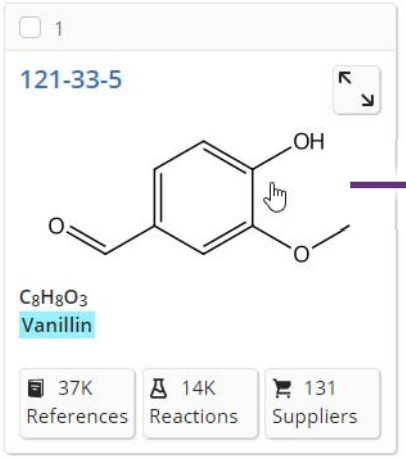
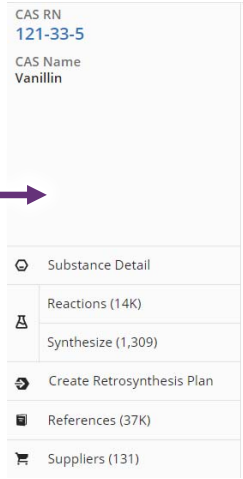
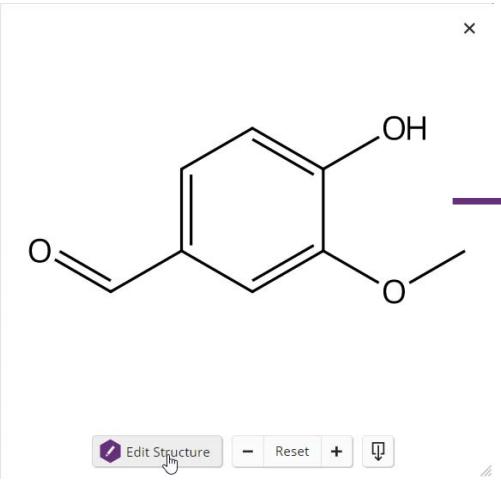
Search vanillin and prepare structure search

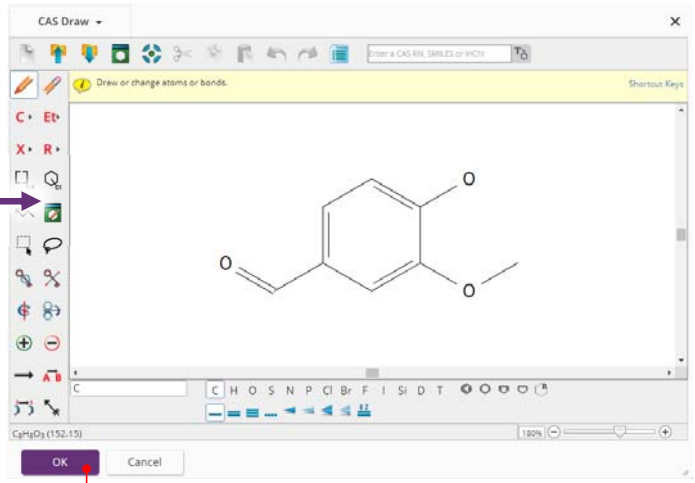


Search for vanillin to use its structure for the derivative search









Click on the structure to open the flyout window

Edit Structure

Click OK to go back to the main interface

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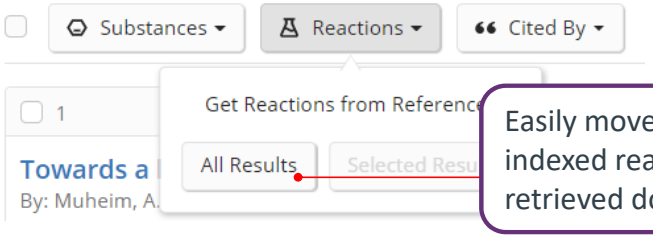
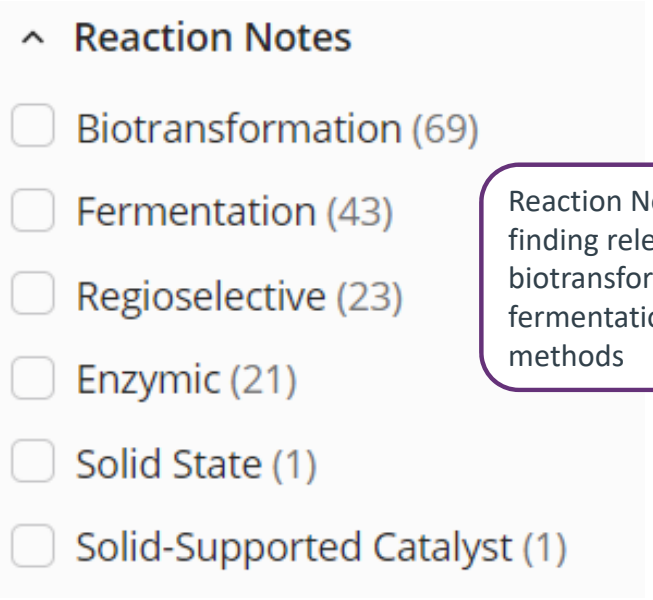
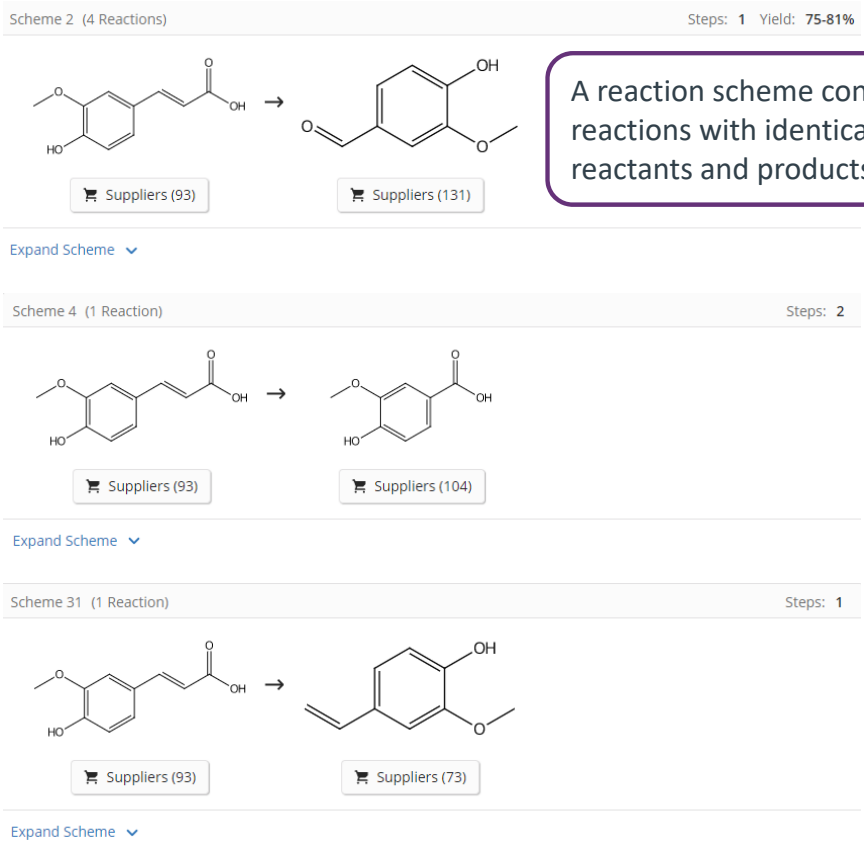
Ferulic acid appears as starting material in several reactions



Easily move to the indexed reactions for all retrieved documents



Reaction Notes facilitate finding relevant biotransformation or fermentation preparation methods



A reaction scheme contains reactions with identical reactants and products.

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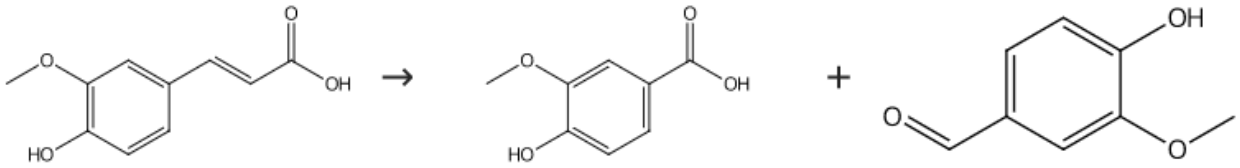
We can limit to specific journals with a biochemical focus and check the reaction summaries

Publication Name

- ☐ ChemBioChem (117)
- ☐ Germany (42)
- ☑ Chemistry & Biology (Cambridge, MA, United States) (14)
- ☐ World Intellectual Property Organization (8)
- ☐ Journal of the American Chemical Society (6)
- ☑ Journal of Industrial Microbiology & Biotechnology (3)
- ☑ Enzyme and Microbial Technology (2)
- ☐ Applied and Environmental Microbiology (1)
- ☑ Asian Journal of Microbiology, Biotechnology & Environmental Sciences (1)

Scheme 3 (1 Reaction) Steps: 1



Suppliers (93) Suppliers (104) Suppliers (131)

☐ Reaction Summary Steps: 1

1.1 Reagents: Ammonium nitrate, Sulfuric acid magnesium salt (1:1), Disodium phosphate, Sodium chloride, Monopotassium phosphate, Calcium chloride
Solvents: Water; 20 d, pH 7.0, 28 °C

View Reaction Detail | Experimental Protocols

Microbial transformation of ferulic acid to vanillic acid by Streptomyces sannanensis MTCC 6637

...chnology (2007),

We can eye-screen reagents, catalysts, solvents and conditions with the reaction summaries

Colla

Open the Reaction Detail or Experimental protocols to access the detailed procedure

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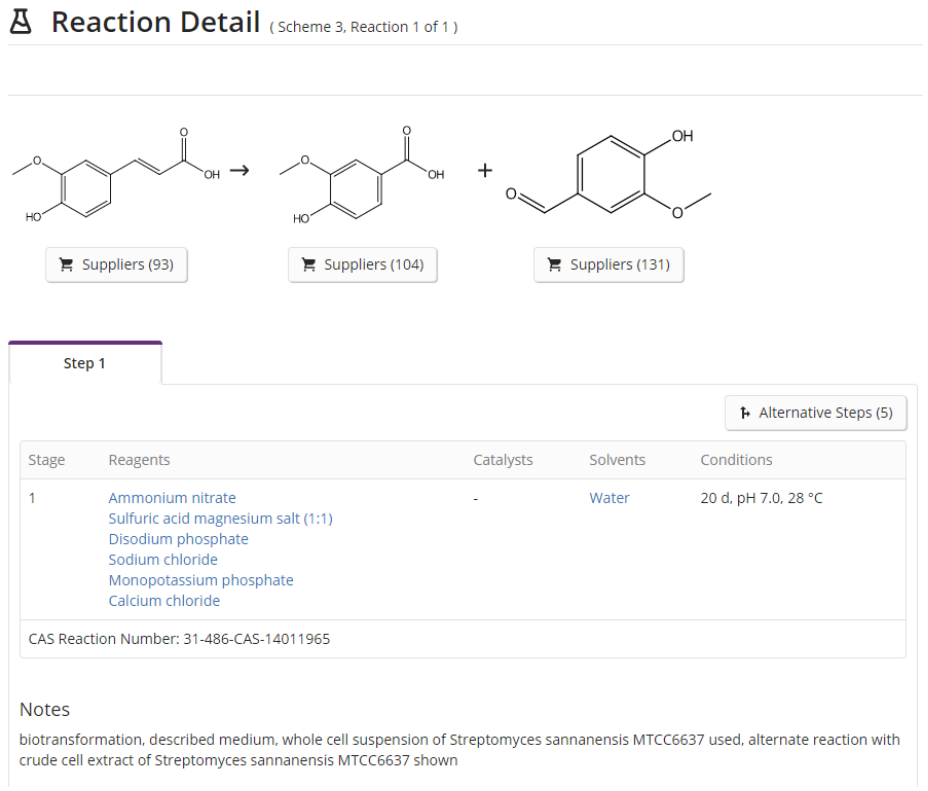
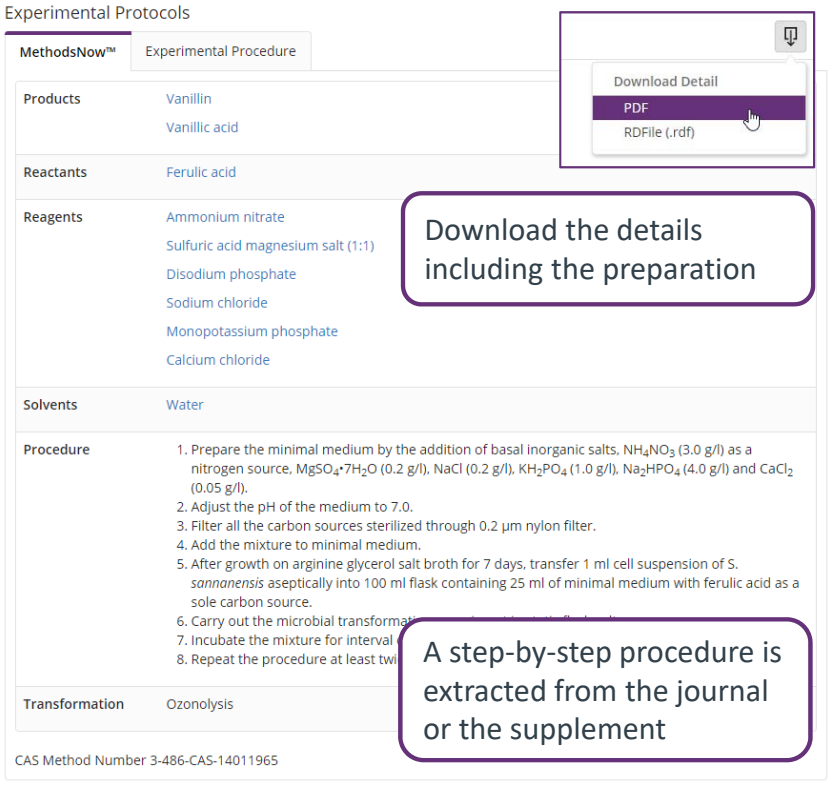
The reaction details contain the experimental protocol, which can be downloaded easily





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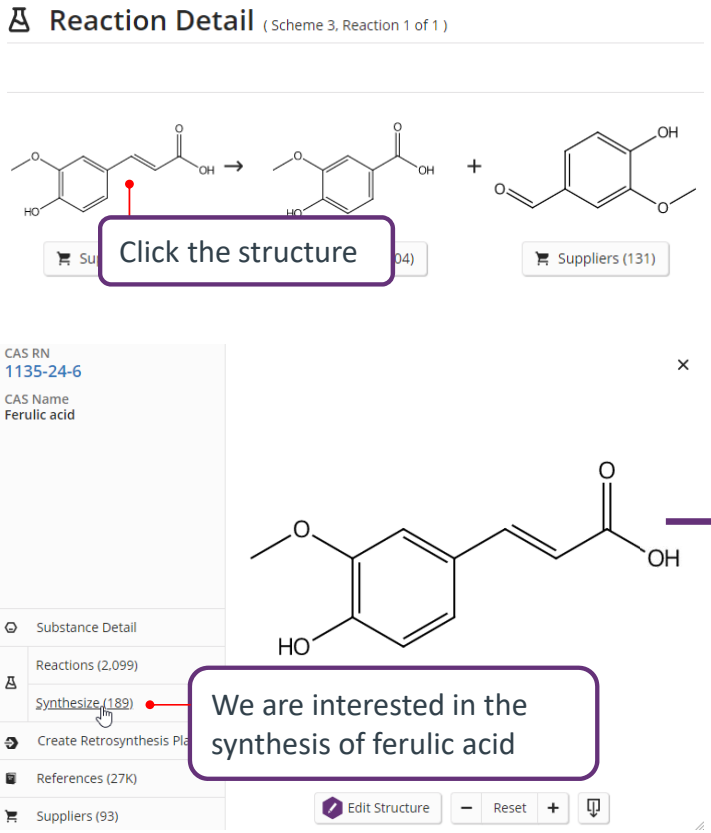
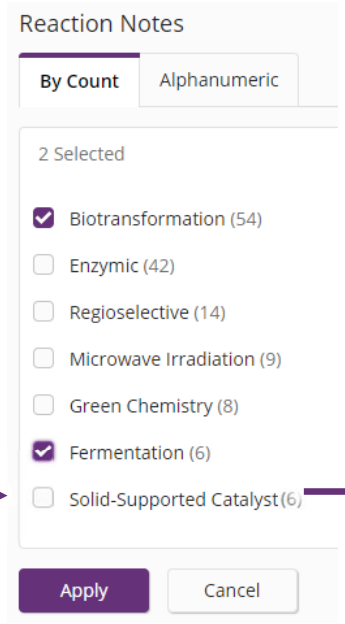
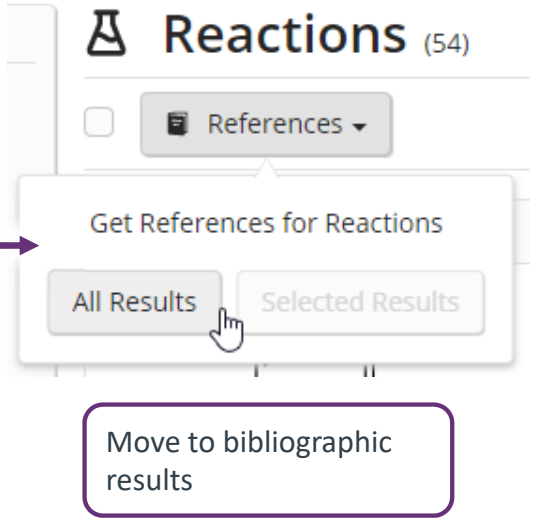
Can we also identify biotransformations to prepare ferulic acid?







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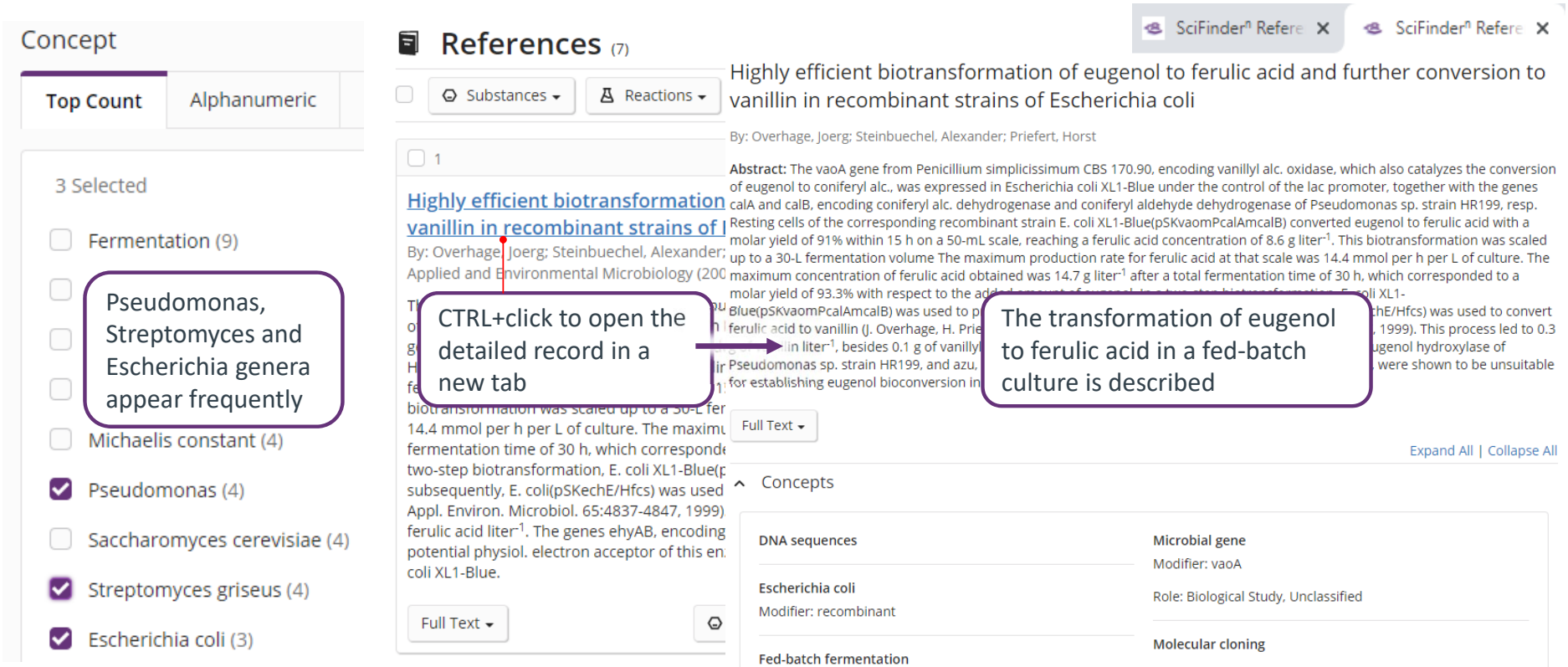
Concepts help us understand which bacteria play a role in biotransformations to produce ferulic acid



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