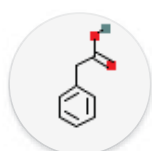
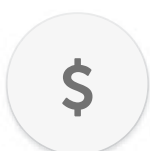



 Compound Summary for CID 999

# Phenylacetic Acid

[► Cite this Record](#)


STRUCTURE



VENDORS



DRUG INFO



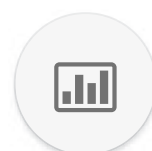
PHARMACOLOGY



LITERATURE



PATENTS



BIOACTIVITIES

<b>PubChem CID:</b>	999
<b>Chemical Names:</b>	PHENYLACETIC ACID; 2-Phenylacetic acid; Benzeneacetic acid; 103-82-2; Phenylethanoic acid; Alpha-Toluic acid <a href="#">More...</a>
<b>Molecular Formula:</b>	C8H8O2; C6H5CH2CO2H
<b>Molecular Weight:</b>	136.15 g/mol
<b>InChI Key:</b>	WLJVXDMOQOGPHL-UHFFFAOYSA-N
<b>Drug Information:</b>	<a href="#">Drug Indication</a> <a href="#">Clinical Trials</a> <a href="#">FDA UNII</a>
<b>Safety Summary:</b>	<a href="#">Laboratory Chemical Safety Summary (LCSS)</a>

Phenylacetic acid is a [Nitrogen Binding Agent](#). The mechanism of action of phenylacetic acid is as an [Ammonium Ion Binding Activity](#).

[► FDA Pharmacology Summary from FDA Pharm Classes](#)

[Phenyl acetate](#) (or [phenylacetate](#)) is a carboxylic acid ester that has been found in the biofluids of patients with nephritis and/or hepatitis as well as patients with phenylketonuria (PKU), an inborn error of metabolism. Excess [phenylalanine](#) in the body can be disposed of through a transamination process leading to the production of [phenylpyruvate](#). The [phenylpyruvate](#) can be further metabolized into a number of products. Decarboxylation of [phenylpyruvate](#) gives [phenylacetate](#), while a reduction reaction gives phenyllactate. The [phenylacetate](#) can be further conjugated with [glutamine](#) to give phenylacetyl glutamine. All of these metabolites can be detected in serum and urine of PKU patients. [Phenyl acetate](#) is also produced endogenously as the metabolite of [2-Phenylethylamine](#), which is mainly metabolized by monoamine oxidase to form [phenyl acetate](#). [2-phenylethylamine](#) is an "endogenous [amphetamine](#)" which may modulate central adrenergic functions, and the urinary [phenyl acetate](#) levels have been postulated as a marker for depression. (PMID: [17978765](#), [476920](#), [6857245](#)). [Phenylacetate](#) is also found in essential oils, e. g. neroli, rose oil, free and as esters' and in many fruits. As a result it is used as a perfumery and flavoring ingredient.

[► Metabolite Description from Human Metabolome Database \(HMDB\)](#)

8/16/2018

Phenylacetic acid | C8H8O2 - PubChem

[PUBCHEM](#) > [COMPOUND](#) > PHENYLACETIC ACID

*Modify Date: 2018-08-15; Create Date: 2004-09-16*

---

## Contents

---

1 2D Structure

---

2 3D Conformer

---

3 Names and Identifiers

---

4 Chemical and Physical Properties

---

5 Related Records

---

6 Chemical Vendors

---

7 Drug and Medication Information

---

8 Food Additives and Ingredients

---

9 Pharmacology and Biochemistry

---

10 Use and Manufacturing

---

11 Identification

---

12 Safety and Hazards

---

13 Toxicity

---

14 Literature

---

15 Patents

---

16 Biomolecular Interactions and Pathways

---

17 Biological Test Results

---

18 Classification

---

19 Information Sources

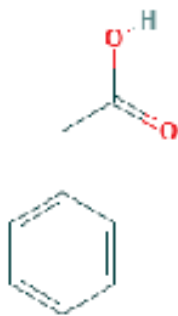
---

# 1 2D Structure

 Search

 Download

 Get Image



 Magnify


▸ *from PubChem*

## 2 3D Conformer

---

 Search

 Download

 Get Image

CLICK TO LOAD...

fy

Show Hydrogens

Show Atoms

Animate

---

▶ *from PubChem*

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.