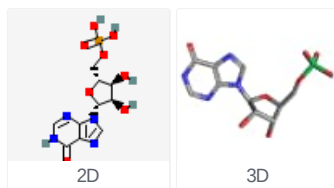


COMPOUND SUMMARY

Inosinic acid

PubChem CID 135398640

Structure

[Find Similar Structures](#)

Molecular Formula

 $C_{10}H_{13}N_4O_8P$

Synonyms

Inosinic acid
5'-inosinic acid
131-99-7
inosine 5'-monophosphate
inosine monophosphate[More...](#)

Molecular Weight

348.21

Dates

Modify 2022-11-26
Create 2019-01-15

Inosinic Acid is a purine ribonucleotide with [hypoxanthine](#) as the base and one [phosphate](#) group attached to the sugar moiety. Inosinic acid and its salt forms are used as flavor enhancers in industrial food production. In vivo, inosinic acid is involved in [purine](#) metabolism and acts as an intermediate in the synthesis of [adenine](#) and [guanine](#), which are precursors for the second messenger signaling molecules [adenosine monophosphate](#) (AMP) and [guanosine monophosphate](#) (GMP), respectively.

[▶ NCI Thesaurus \(NCIt\)](#)

inosinic acid is a natural product found in [Corynebacterium ammoniagenes](#), [Synechococcus elongatus](#), and [other organisms](#) with data available.

[▶ LOTUS - the natural products occurrence database](#)

Inosinic acid is a metabolite found in or produced by [Saccharomyces cerevisiae](#).

[▶ Yeast Metabolome Database \(YMDB\)](#)[Cite](#)[Download](#)

CONTENTS

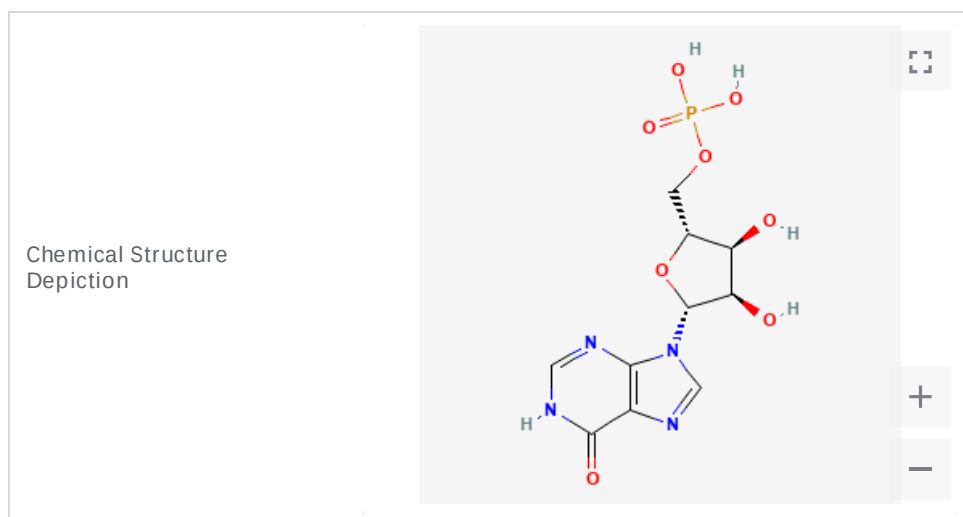
[Title and Summary](#)[1 Structures](#)[2 Biologic Description](#)[3 Names and Identifiers](#)[4 Chemical and Physical Properties](#)[5 Spectral Information](#)[6 Related Records](#)[7 Chemical Vendors](#)[8 Drug and Medication Information](#)[9 Food Additives and Ingredients](#)[10 Pharmacology and Biochemistry](#)[11 Use and Manufacturing](#)[12 Toxicity](#)[13 Associated Disorders and Diseases](#)[14 Literature](#)[15 Patents](#)[16 Interactions and Pathways](#)[17 Biological Test Results](#)[18 Taxonomy](#)[19 Classification](#)[20 Information Sources](#)

1 Structures



1.1 2D Structure





► PubChem

1.2 3D Conformer

▶ PubChem

2 Biologic Description

IUPAC Condensed	P-rIno
Sequence	N
HELM	RNA1{PR([*n1cnc2c1nc[nH]c2=O \$ _R1.....\$)])\$\$\$\$
IUPAC	5'-phosphono-inosine

► PubChem

3 Names and Identifiers

3.1 Computed Descriptors

3.1.1 IUPAC Name

[(2*R*,3*S*,4*R*,5*R*)-3,4-dihydroxy-5-(6-oxo-1*H*-purin-9-yl)oxolan-2-yl]methyl dihydrogen phosphate

Computed by Lexichem TK 2.7.0 (PubChem release 2021.10.14)

► PubChem

3.1.2 InChI

InChI=1S/C10H13N4O8P/c15-6-4(1-21-23(18,19)20)22-10(7(6)16)14-3-13-5-8(14)11-2-12-9(5)17/h2-4,6-7,10,15-16H,1H2,(H,11,12,17)(H2,18,19,20)/t4,-6,-7,-10-/m1/s1

Computed by InChI 1.0.6 (PubChem release 2021.10.14)

► PubChem

3.1.3 InChIKey

GRSZFWQUAKGDAV-KQYNXXCUSA-N

Computed by InChI 1.0.6 (PubChem release 2021.10.14)

► PubChem

3.1.4 Canonical SMILES



C1=NC2=C(C(=O)N1)N=CN2C3C(C(C(O3)COP(=O)(O)O)O)O

Computed by OEChem 2.3.0 (PubChem release 2021.10.14)

► PubChem

3.1.5 Isomeric SMILES



C1=NC2=C(C(=O)N1)N=CN2[C@H]3[C@@H]([C@@H]([C@H](O3)COP(=O)(O)O)O)O

Computed by OEChem 2.3.0 (PubChem release 2021.10.14)

► PubChem

3.2 Molecular Formula



C₁₀H₁₃N₄O₈P

► EU Food Improvement Agents; PubChem

3.3 Other Identifiers



3.3.1 CAS



131-99-7

► CAS Common Chemistry; ChemIDplus; DrugBank; EPA Chemicals under the TSCA; EPA ...

30918-54-8

► EPA DSSTox

3.3.2 Related CAS



30918-54-8

Compound: Polyinosinic acid

► CAS Common Chemistry

3.3.3 Deprecated CAS



138240-72-9, 485-83-6, 736074-82-1, 801187-33-7, 1080065-96-8, 1294552-14-9

► ChemIDplus

138240-72-9, 485-83-6, 736074-82-1, 801187-33-7

► EPA DSSTox

3.3.4 European Community (EC) Number





3.3.5 UNII

TAO7US05G5



3.3.6 DSSTox Substance ID

DTXSID4044294

DTXSID80948097



3.3.7 Wikidata

Q27074273



3.3.8 NCI Thesaurus Code

C162311



3.4 Synonyms



3.4.1 Mesh Entry Terms

Acid, Inosinic	Sodium Inosinate
----------------	------------------



3.4.2 Depositor-Supplied Synonyms

Inosinic acid	INOSINE-5'-MONOPHOSPHATE	ribosylhypoxanthine mono
5'-inosinic acid	5'-inosine monophosphate	CID 5280323
131-99-7	Inosine-5'-monophosphoric acid	30918-54-8
inosine 5'-monophosphate	Inosine 5'-Monophosphoric acid	[(2R,3S,4R,5R)-3,4-dihydro
inosine monophosphate	Cytosine inosinate	phosphate
5'-IMP	BRN 0630517	((2R,3S,4R,5R)-3,4-Dihydro
5'-inosinate	TAO7US05G5	dihydrogen phosphate
[[{(2R,3S,4R,5R)-3,4-dihydro		

4 Chemical and Physical Properties



4.1 Computed Properties



Property Name	Property Value	Reference
Molecular Weight	348.21	Computed by PubChem 2.2 (PubChem release 2021.10.14)
XLogP3	-3	Computed by XLogP3 3.0 (PubChem release 2021.10.14)
Hydrogen Bond Donor Count	5	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Hydrogen Bond Acceptor Count	10	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Rotatable Bond Count	4	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Exact Mass	348.04710038	Computed by PubChem 2.2 (PubChem release 2021.10.14)
Monoisotopic Mass	348.04710038	Computed by PubChem 2.2 (PubChem release 2021.10.14)
Topological Polar Surface Area	176 Å ²	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Heavy Atom Count	23	Computed by PubChem
Formal Charge	0	Computed by PubChem
Complexity	555	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Isotope Atom Count	0	Computed by PubChem
Defined Atom Stereocenter Count	4	Computed by PubChem
Undefined Atom Stereocenter Count	0	Computed by PubChem
Defined Bond Stereocenter Count	0	Computed by PubChem
Undefined Bond Stereocenter Count	0	Computed by PubChem
Covalently-Bonded Unit Count	1	Computed by PubChem
Compound Is Canonicalized	Yes	Computed by PubChem (release 2021.10.14)

► [PubChem](#)

4.2 Experimental Properties



4.2.1 Physical Description



Odourless, colourless or white crystals or powder

► [EU Food Improvement Agents](#)

Solid

► [Human Metabolome Database \(HMDB\)](#)

4.2.2 Solubility



Freely soluble in [water](#), slightly soluble in [ethanol](#)

► [EU Food Improvement Agents](#)



4.2.3 pH

Between 1.0 and 2.0 (5 % solution)

► EU Food Improvement Agents



4.2.4 Dissociation Constants

pKa

2.4

MERCK INDEX (1996): pK1

► DrugBank



4.2.5 Collision Cross Section

170.4 Å² [M+Na]⁺ [CCS Type: DT, Method: single field calibrated with Agilent tune mix (Agilent)]

<https://pubs.acs.org/doi/abs/10.1021/acs.analchem.6b03091>

► CCSbase

173.83 Å² [M-H]⁻ [CCS Type: DT, Method: stepped-field]

<https://pubs.rsc.org/en/content/articlelanding/2017/sc/c7sc03464d>

► CCSbase

169 Å² [M+H]⁺ [CCS Type: TW, Method: calibrated with [polyalanine](#)]

<https://pubs.acs.org/doi/abs/10.1021/ac500405x>

► CCSbase

174.3 Å² [M+H]⁺ [CCS Type: DT, Method: single field calibrated with ESI Low

Concentration Tuning Mix (Agilent)]

<https://pubs.acs.org/doi/abs/10.1021/acs.analchem.8b04322>

► CCSbase

170.8 Å² [M+Na]⁺ [CCS Type: DT, Method: single field calibrated with ESI Low

Concentration Tuning Mix (Agilent)]

<https://pubs.acs.org/doi/abs/10.1021/acs.analchem.8b04322>

► CCSbase

171.2 Å² [M-H]⁻ [CCS Type: DT, Method: single field calibrated with ESI Low

Concentration Tuning Mix (Agilent)]

<https://pubs.acs.org/doi/abs/10.1021/acs.analchem.8b04322>

► CCSbase

166.5 Å² [M+Na-2H]⁻ [CCS Type: DT, Method: single field calibrated with ESI Low

Concentration Tuning Mix (Agilent)]

<https://pubs.acs.org/doi/abs/10.1021/acs.analchem.8b04322>

► CCSbase

166.6 Å² [M-2H+Na]⁻

171.4 Å² [M-H]⁻

171.5 Å² [M+Na]⁺

5 Spectral Information

?

5.1 1D NMR Spectra

?

5.1.1 1H NMR Spectra

?

Showing 2 of 3 [View More](#)

Spectra ID	1142
Instrument Type	Varian
Frequency	500 MHz
Solvent	Water
pH	7.00
Shifts [ppm]:Intensity	4.01:14.43, 4.01:26.57, 4.02:25.90, 4.03:15.85, 4.36:8.68, 4.36:8.95, 4.50:3.72, 4.50:4.12, 4.51:3.69, 6.12:41.10, 6.14:38.14, 8.21:100.00, 8.55:91.64
Thumbnail	

▶ [Human Metabolome Database \(HMDB\)](#)

Spectra ID	4857
Instrument Type	Bruker
Solvent	D2O
pH	7.4
Shifts [ppm]:Intensity	0.00:0.34, 4.00:0.35, 4.02:0.96, 4.03:1.84, 4.04:2.08, 4.05:1.04, 4.06:0.37, 4.37:1.31, 4.38:1.31, 4.50:1.18, 4.52:1.59, 4.53:1.13, 4.76:1.39, 4.77:2.31, 4.79:1.96, 6.11:2.09, 6.12:2.03, 8.19:4.47, 8.55:4.12
Thumbnail	

▶ [Human Metabolome Database \(HMDB\)](#)

5.1.2 13C NMR Spectra

Spectra ID	4858
Instrument Type	Bruker
Solvent	D2O
pH	7.4
Shifts [ppm]:Intensity	126.23:28.76, 142.66:66.42, 149.10:67.26, 151.50:38.33, 161.44:31.15, 66.16:38.31, 66.20:38.97, 73.36:98.24, 77.49:98.92, 87.52:50.94, 87.61:51.88, 90.07:92.53
Thumbnail	

▶ [Human Metabolome Database \(HMDB\)](#)

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Thumbnail	

▶ [SpectraBase](#)

5.2 2D NMR Spectra

5.2.1 1H-1H NMR Spectra

2D NMR Spectra Type	1H-1H TOCSY
Spectra ID	983
Shifts [ppm] (F2:F1)	4.02:4.08, 4.04:4.04, 4.04:4.38, 4.04:4.52, 4.05:4.00, 4.38:4.04, 4.38:4.38, 4.38:4.52, 4.38:4.78, 4.52:4.04, 4.52:4.38, 4.52:4.52, 4.52:4.78, 4.52:6.12, 4.78:4.38, 4.78:4.52, 4.78:6.12, 4.83:4.83, 6.12:4.52, 6.12:4.78,

Thumbnail

Human Metabolome Database (HMDB)

5.2.2 1H-13C NMR Spectra

Thumbnail

2D NMR Spectra Type

1H-13C HSQC

Spectra ID

1187

Instrument Type

Bruker

Frequency

600 MHz

Solvent

Water

pH

7.00

Shifts [ppm] (F2:F1):Intensity

4.02:66.17:0.96, 4.37:87.42:0.99, 4.51:73.32:1.00, 4.78:77.39:0.76, 6.12:89.95:1.00, 8.14:149.01:0.40, 8.26:148.97:0.36, 8.55:142.60:0.50

5.3 Mass Spectrometry

Thumbnail

5.3.1 GC-MS

Showing 2 of 4 View More

Spectra ID	31049
Instrument Type	GC-MS
SPLASH	splash10-014i-1952000000-fd534f438bc14efb9a2c
Top 5 Peaks	169.0 1 315.0 0.49 230.0 0.29

299.0 0.24

Thumbnail

▶ [Human Metabolome Database \(HMDB\)](#)

Spectra ID	32262
Instrument Type	GC-EI-TOF
Ionization Mode	positive
SPLASH	splash10-014i-0952000000-240bf898db7f932db317
Top 5 Peaks	169.0 100 315.0 53.05 147.0 43.14 230.0 30.53 193.0 28.83
Thumbnail	
Notes	instrument=Leco Pegasus IV

▶ [Human Metabolome Database \(HMDB\)](#)

5.3.2 MS-MS



Showing 2 of 8 [View More](#)

Spectra ID	2235630
Ionization Mode	Negative
SPLASH	splash10-0002-2009000000-fd4ac18ae0dd374e6ff5
Top 5 Peaks	347.04307 100 78.95926 20.40 96.9707 7.30 210.99842 3.70 135.02998 2.10

Thumbnail

► Human Metabolome Database (HMDB)

Spectra ID	2237725
Ionization Mode	Negative
SPLASH	splash10-004f-9201000000-349e076b55d7b34813f1
Top 5 Peaks	78.95926 100 96.96958 51 135.03109 23 347.04034 16.80 211.00292 11.30
Thumbnail	

► Human Metabolome Database (HMDB)

5.3.3 LC-MS



Showing 2 of 13 View More

Accession ID	MSBNK-RIKEN-PR100152
Authors	Matsuda F, Suzuki M, Sawada Y, Plant Science Center, RIKEN.
Instrument	UPLC Q-ToF Premier, Waters
Instrument Type	LC-ESI-QTOF
MS Level	MS2
Ionization Mode	POSITIVE
Ionization	ESI
Collision Energy	Ramp 5-60 V
Precursor m/z	349.0549
Precursor Adduct	[M+H] ⁺
	137.0468 999

Top 5 Peaks	110.0353 43 119.0362 33 94.042 24
SPLASH	splash10-000i-1900000000-d9a723b143b346290896
Thumbnail	
License	CC BY-SA

► [MassBank Europe](#)

Accession ID	MSBNK-RIKEN-PR100573
Authors	Matsuda F, Suzuki M, Sawada Y, Plant Science Center, RIKEN.
Instrument	UPLC Q-Tof Premier, Waters
Instrument Type	LC-ESI-QTOF
MS Level	MS2
Ionization Mode	NEGATIVE
Ionization	ESI
Collision Energy	Ramp 5-60 V
Precursor m/z	347.0393
Precursor Adduct	[M-H]-
Top 5 Peaks	78.9602 999 347.0393 639 96.9704 496 135.0315 360 92.026 132
SPLASH	splash10-002b-9203000000-e2ceede282569ac77de5
Thumbnail	
License	CC BY-SA

► [MassBank Europe](#)

5.3.4 Other MS



Showing 2 of 5 View More

MoNA ID	MoNA011119
MS Category	Experimental
MS Level	MS2
Precursor Type	[M+H] ⁺
Precursor m/z	349.054382324219
Instrument	Agilent 6550 iFunnel
Instrument Type	Q-TOF
Ionization Mode	Positive
Top 5 Peaks	137.0456 100 97.02855 5.16
SPLASH	splash10-000i-0900000000-11acf4a747474c165349
Thumbnail	
Submitter	romanas chaleckis, gunma university

[► MassBank of North America \(MoNA\)](#)

MoNA ID	MoNA011120
MS Category	Experimental
MS Level	MS2
Precursor Type	[M+H] ⁺
Precursor m/z	349.054382324219
Instrument	Agilent 6550 iFunnel
Instrument Type	Q-TOF
Ionization Mode	Positive
Top 5 Peaks	137.0456 100 97.02834 8.61
SPLASH	splash10-000i-0900000000-7e872d86f058899156a9
Thumbnail	

Submitter	romanas chaleckis, gunma university
-----------	-------------------------------------

► [MassBank of North America \(MoNA\)](#)

5.4 UV Spectra



Maximum absorption of a 20 mg/l solution in 0,01N HCl at 250 nm

► [EU Food Improvement Agents](#)

6 Related Records



6.1 Related Compounds with Annotation



► [PubChem](#)

6.2 Related Compounds



Same Connectivity	28 Records
Same Stereo	4 Records
Same Isotope	23 Records
Same Parent, Connectivity	116 Records
Same Parent, Stereo	48 Records
Same Parent, Isotope	108 Records
Same Parent, Exact	44 Records
Mixtures, Components, and Neutralized Forms	83 Records
Similar Compounds	4,163 Records
Similar Conformers	2,645 Records

► [PubChem](#)

6.3 Substances



6.3.1 Related Substances



All	782 Records
Same	267 Records
Mixture	515 Records

▶ PubChem

6.3.2 Substances by Category



▶ PubChem

6.4 Entrez Crosslinks



Pub Med	170 Records
Protein Structures	145 Records
Taxonomy	2 Records
Gene	3 Records

▶ PubChem

7 Chemical Vendors



▶ PubChem

8 Drug and Medication Information



8.1 Clinical Trials



8.1.1 ClinicalTrials.gov



► [ClinicalTrials.gov](#)

8.1.2 EU Clinical Trials Register



► [EU Clinical Trials Register](#)

9 Food Additives and Ingredients



9.1 Food Additive Classes



JECFA Functional Classes

Food Additives -> FLAVOUR_ENHANCER;

► [Joint FAO/WHO Expert Committee on Food Additives \(JECFA\)](#)

9.2 Evaluations of the Joint FAO/WHO Expert Committee on Food Additives - JECFA



Chemical Name	INOSINIC ACID
Evaluation Year	1985
ADI	NOT SPECIFIED
Comments	Group ADI for inosinic acid and its calcium , dipotassium and disodium salts
Report	TRS 733-JECFA 29/25
Tox Monograph	NOT PREPARED

► [Joint FAO/WHO Expert Committee on Food Additives \(JECFA\)](#)

10 Pharmacology and Biochemistry

10.1 Human Metabolite Information

10.1.1 Tissue Locations

All Tissues

- ▶ [Human Metabolome Database \(HMDB\)](#)

10.1.2 Cellular Locations

Cytoplasm
Extracellular
Mitochondria

- ▶ [Human Metabolome Database \(HMDB\)](#)

10.1.3 Metabolite Pathways

[Adenine phosphoribosyltransferase deficiency \(APRT\)](#) [Lesch-Nyhan Syndrome \(LNS\)](#)
[Adenosine Deaminase Deficiency](#) Total 20 pathways, visit the [HMDB page](#)

- ▶ [Human Metabolome Database \(HMDB\)](#)

10.2 Biochemical Reactions

- ▶ [PubChem](#)

11 Use and Manufacturing

11.1 Uses

11.1.1 Use Classification

Food additives

- ▶ [EU Food Improvement Agents](#)

Food Additives -> FLAVOUR_ENHANCER; -> JECFA Functional Classes

- ▶ [Joint FAO/WHO Expert Committee on Food Additives \(JECFA\)](#)

11.2 General Manufacturing Information

EPA TSCA Commercial Activity Status
5'-inosinic acid: INACTIVE

<https://www.epa.gov/tscainventory>
EPA Chemicals under the TSCA

12 Toxicity

12.1 Toxicological Information

12.1.1 Acute Effects

ChemIDplus

13 Associated Disorders and Diseases

Comparative Toxicogenomics Database (CTD)

Disease	References
---------	------------

Febrile seizures	PubMed: 6198481, 11102727, 1794121, 10688964
Crohn's disease	PubMed: 16440420, 11418788, 8723414, 19491857, 17269711, 23516449, 23867873, 24811995, 25598765, 26806034, 26848182, 27609529, 28842642

▶ [Human Metabolome Database \(HMDB\)](#)

14 Literature



14.1 NLM Curated PubMed Citations



▶ [PubChem](#)

14.2 Springer Nature References



▶ [Springer Nature](#)

14.3 Wiley References



14.4 Depositor Provided PubMed Citations



PubChem

14.5 Synthesis References



Yasuhiko Yoshihara, Yoshio Kawahara, Yasutsugu Yamada, Sigehiko Ikeda, "Process for producing 5'-inosinic acid by fermentation," U.S. Patent US5164306, issued September, 1985.

DrugBank

Park, Yeong Hun; Cho, Gwang Myeong; Baek, Min Ji; Hong, Guk Gi; Lee, Jin Nam. Method for preparing 5'-inosinic acid by using microbe capable of over-expressing purC gene. Repub. Korea (2007), 7pp.

Human Metabolome Database (HMDB)

14.6 Metabolite References



14.7 Chemical Co-Occurrences in Literature



Human Metabolome Database (HMDB)

PubChem

14.8 Chemical-Gene Co-Occurrences in Literature



PubChem

14.9 Chemical-Disease Co-Occurrences in Literature



PubChem

15 Patents



15.1 Depositor-Supplied Patent Identifiers



▶ PubChem

[Link to all deposited patent identifiers](#)

▶ PubChem

15.2 WIPO PATENTSCOPE



Patents are available for this chemical structure:

<https://patentscope.wipo.int/search/en/result.jsf?inchikey=GRSZFWQUAKGDAV-KQYNXXCUSA-N>

▶ PATENTSCOPE (WIPO)

16 Interactions and Pathways



16.1 Protein Bound 3D Structures



▶ RCSB Protein Data Bank (RCSB PDB)

[View 145 proteins in NCBI Structure](#)

▶ PubChem

16.1.1 Ligands from Protein Bound 3D Structures



PDBe Ligand Code	IMP
PDBe Conformer	

▶ Protein Data Bank in Europe (PDBe)

16.2 Chemical-Target Interactions



► Comparative Toxicogenomics Database (CTD)

► DrugBank

► Therapeutic Target Database (TTD)

16.3 Pathways



► PubChem

17 Biological Test Results



17.1 BioAssay Results



► [PubChem](#)

18 Taxonomy



Inosinic acid is a metabolite found in or produced by [Escherichia coli](#) (strain K12, MG1655).

► [E. coli Metabolome Database \(ECMDB\)](#)

WormJam Metabolites Local CSV for MetFrag | [DOI:10.5281/zenodo.3403364](https://doi.org/10.5281/zenodo.3403364)

WormJam: A consensus C. elegans Metabolic Reconstruction and Metabolomics Community and Workshop Series, Worm, 6:2, e1373939, DOI:10.1080/21624054.2017.1373939

► [ECI Group, LCSB, University of Luxembourg](#)

The LOTUS Initiative for Open Natural Products Research: frozen dataset union wikidata (with metadata) | [DOI:10.5281/zenodo.5794106](https://doi.org/10.5281/zenodo.5794106)

► LOTUS - the natural products occurrence database

Inosinic acid is a metabolite found in or produced by [Saccharomyces cerevisiae](#).

► Yeast Metabolome Database (YMDB)

19 Classification



19.1 MESH Tree



19.2 CHEBI Ontology

► Medical Subject Headings (Mesh)

19.3 KEGG : Glycosides



► KEGG

19.4 ChemIDplus



► ChemIDplus

19.5 ChEMBL Target Tree



► ChEMBL

19.6 NORMAN Suspect List Exchange Classification



▶ NORMAN Suspect List Exchange

19.7 CCSBase Classification



▶ CCSbase

19.8 EPA DSSTox Classification



▶ EPA DSSTox

19.9 LOTUS Tree



► LOTUS - the natural products occurrence database

20 Information Sources



FIL ALL SOURCES



1. CAS Common Chemistry

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<https://creativecommons.org/licenses/by-nc/4.0/>

Inosinic acid

https://commonchemistry.cas.org/detail?cas_rn=131-99-7

Polyinosinic acid

https://commonchemistry.cas.org/detail?cas_rn=30918-54-8

2. ChemIDplus

LICENSE

<https://www.nlm.nih.gov/copyright.html>

Inosinic acid

<https://chem.nlm.nih.gov/chemidplus/sid/0000131997>

ChemIDplus Chemical Information Classification

<https://chem.nlm.nih.gov/chemidplus/>

3. DrugBank

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https://www.drugbank.ca/legal/terms_of_use

Inosinic Acid

<https://www.drugbank.ca/drugs/DB04566>

4. EPA Chemicals under the TSCA

LICENSE

<https://www.epa.gov/privacy/privacy-act-laws-policies-and-resources>

5'-Inosinic acid

<https://www.epa.gov/chemicals-under-tsca>

5. EPA DSSTox

LICENSE

<https://www.epa.gov/privacy/privacy-act-laws-policies-and-resources>

Polyinosinic acid

<https://comptox.epa.gov/dashboard/DTXSID4044294>

5'-Inosinic acid

<https://comptox.epa.gov/dashboard/DTXSID80948097>

CompTox Chemicals Dashboard Chemical Lists

<https://comptox.epa.gov/dashboard/chemical-lists/>

6. European Chemicals Agency (ECHA)

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