

COMPOUND SUMMARY

Racemethionine

PubChem CID	876
Structure	2D 3D
Chemical Safety	Laboratory Chemical Safety Summary (LCSS) Datasheet
Molecular Formula	$C_5H_{11}NO_2S$ $CH_3S(CH_2)_2CH(NH_2)COOH$
Synonyms	DL-METHIONINE 59-51-8 Racemethionine methionine Acimetion View More
Molecular Weight	149.21 g/mol Computed by PubChem 2.2 (PubChem release 2021.10.14)
Dates	Create: Modify: 2004-09-16 2024-03-30
Description	Methionine is a sulfur-containing amino acid that is butyric acid bearing an amino substituent at position 2 and a methylthio substituent at position 4. It has a role as an Escherichia coli metabolite, a Saccharomyces cerevisiae metabolite, a plant metabolite, a Daphnia magna metabolite and an algal metabolite. It is an alpha-amino acid and a sulfur-containing amino acid. It is functionally related to a butyric acid. It is a conjugate base of a

methioninium. It is a conjugate acid of a methioninate. It is a tautomer of a methionine zwitterion.

▶ ChEBI

A preparation of **methionine** that includes a mixture of **D**-**methionine** and **L**-**methionine** isomers.

DrugBank

DL-Methionine is a natural product found in **Drosophila** melanogaster, Mycoplasma gallisepticum, and other organisms with data available.

▶ LOTUS - the natural products occurrence database

See also: ... View More ...

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 Safety and Hazards	~
13 Toxicity	~

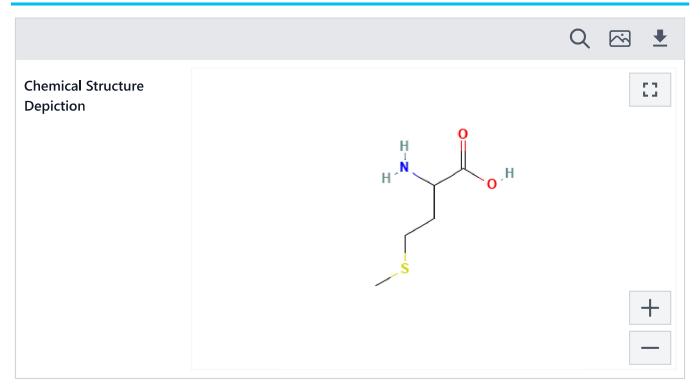


1 Structures





1.1 2D Structure



▶ PubChem

1.2 3D Conformer





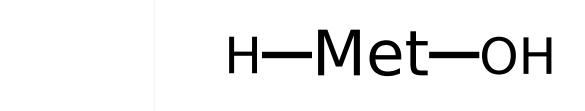


PubChem

SVG Image

2 Biologic Description





IUPAC Condensed	H-DL-Met-OH
Sequence	М
PLN	H-M-OH
HELM	PEPTIDE1{(M,[dM])}\$\$\$\$V2.0
IUPAC	DL-methionine

▶ PubChem

3 Names and Identifiers	(P)
3.1 Computed Descriptors	? Z
3.1.1 IUPAC Name	? Z
2-amino-4-methylsulfanylbutanoic acid	
Computed by Lexichem TK 2.7.0 (PubChem release 2021.10.14)	
▶ PubChem	
3.1.2 InChI	② 🗹
InChI=1S/C5H11NO2S/c1-9-3-2-4(6)5(7)8/h4H,2-3,6H2,1H3,(H,7,8)	
Computed by InChI 1.0.6 (PubChem release 2021.10.14)	
▶ PubChem	
	0.63
3.1.3 InChlKey	() L
FFEARJCKVFRZRR-UHFFFAOYSA-N	
Computed by InChI 1.0.6 (PubChem release 2021.10.14)	
▶ PubChem	
3.1.4 Canonical SMILES	@ [2]
	0 2
CSCCC(C(=O)O)N Computed by OEChem 2.3.0 (PubChem release 2021.10.14)	
▶ PubChem	
3.2 Molecular Formula	② 🗹
C ₅ H ₁₁ NO ₂ S	
$CH_3S(CH_2)_2CH(NH_2)COOH$	