

Product data sheet



MedKoo Cat#: 574761 Name: Kanosamine HCl CAS: 57649-10-2 Chemical Formula: C ₆ H ₁₄ ClNO ₅ Exact Mass: 215.0561 Molecular Weight: 215.63	
Product supplied as: Powder	
Purity (by HPLC): ≥ 98%	
Shipping conditions: Ambient temperature	
Storage conditions: Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Kanosamine is an antibiotic that inhibits cell wall synthesis in plant-pathogenic oomycetes, certain fungi, and some bacterial species. It has been explored as an alternative and/or supplement to synthetic pesticides and genetic resistance of crop plants for the management of plant disease.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	25.0	115.94
DMSO	25.0	115.94
Ethanol	5.0	23.19
PBS (pH 7.2)	10.0	46.38

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	4.64 mL	23.19 mL	46.38 mL
5 mM	0.93 mL	4.64 mL	9.28 mL
10 mM	0.46 mL	2.32 mL	4.64 mL
50 mM	0.09 mL	0.46 mL	0.93 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Milner JL, Silo-Suh L, Lee JC, He H, Clardy J, Handelsman J. Production of kanosamine by *Bacillus cereus* UW85. *Appl Environ Microbiol.* 1996 Aug;62(8):3061-5. doi: 10.1128/aem.62.8.3061-3065.1996. PMID: 8702302; PMCID: PMC168096.

In vivo study

1. Milner JL, Silo-Suh L, Lee JC, He H, Clardy J, Handelsman J. Production of kanosamine by *Bacillus cereus* UW85. *Appl Environ Microbiol.* 1996 Aug;62(8):3061-5. doi: 10.1128/aem.62.8.3061-3065.1996. PMID: 8702302; PMCID: PMC168096.

7. Bioactivity

Biological target:

Kanosamine hydrochloride is an antibiotic which inhibits the growth of plant-pathogenic oomycetes, certain fungi and a few Bacterial species.

In vitro activity

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Kanosamine was highly inhibitory to growth of plant-pathogenic oomycetes and moderately inhibitory to certain fungi and inhibited few bacterial species tested.

Reference: Appl Environ Microbiol. 1996 Aug;62(8):3061-5. <https://pubmed.ncbi.nlm.nih.gov/8702302/>

In vivo activity

Kanosamine was highly inhibitory to growth of plant-pathogenic oomycetes and moderately inhibitory to certain fungi and inhibited few bacterial species tested.

Reference: Appl Environ Microbiol. 1996 Aug;62(8):3061-5. <https://pubmed.ncbi.nlm.nih.gov/8702302/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.