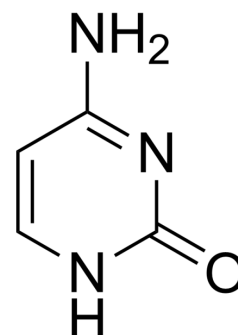


## Cytosine

Cat. No.:	HY-10626
CAS No.:	71-30-7
Molecular Formula:	C <sub>4</sub> H <sub>5</sub> N <sub>3</sub> O
Molecular Weight:	111.1
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 10 mg/mL (90.01 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	9.0009 mL	45.0045 mL	90.0090 mL
		5 mM	1.8002 mL	9.0009 mL	18.0018 mL
	10 mM	0.9001 mL	4.5005 mL	9.0009 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.67 mg/mL (15.03 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.67 mg/mL (15.03 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	Cytosine is one of the four main bases found in DNA and RNA. Cytosine modifications exhibit circadian oscillations that are involved in epigenetic diversity and aging <sup>[1][2]</sup> .	
IC <sub>50</sub> & Target	Microbial Metabolite	Human Endogenous Metabolite

### CUSTOMER VALIDATION

- Molecules. 2023 Apr 11, 28(8), 3375.

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See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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- [1]. Maxam AM, et, al. A new method for sequencing DNA. Proc Natl Acad Sci U S A. 1977 Feb;74(2):560-4.
- [2]. Oh G, et, al. Cytosine modifications exhibit circadian oscillations that are involved in epigenetic diversity and aging. Nat Commun. 2018 Feb 13;9(1):644.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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