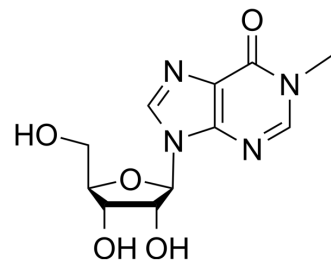


## 1-Methylinosine

<b>Cat. No.:</b>	HY-113139		
<b>CAS No.:</b>	2140-73-0		
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>14</sub> N <sub>4</sub> O <sub>5</sub>		
<b>Molecular Weight:</b>	282.25		
<b>Target:</b>	Nucleoside Antimetabolite/Analog; Endogenous Metabolite		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20.83 mg/mL (73.80 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.5430 mL	17.7148 mL	35.4296 mL
	5 mM	0.7086 mL	3.5430 mL	7.0859 mL
	10 mM	0.3543 mL	1.7715 mL	3.5430 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.08 mg/mL (7.37 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (7.37 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (7.37 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

1-Methylinosine is a modified nucleotide found at position 37 in tRNA 3' to the anticodon of eukaryotic tRNA<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite

### CUSTOMER VALIDATION

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- Talanta. 22 May 2023, 124697
  - bioRxiv. 2023 Feb 2.

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

## REFERENCES

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[1]. 1-Methylinosine-Human Metabolome Database.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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