

## **Product** Data Sheet

# N2-Methylguanosine

Cat. No.: HY-111647 CAS No.: 2140-77-4 Molecular Formula:  $C_{11}H_{15}N_5O_5$  Molecular Weight: 297.27

Target: Nucleoside Antimetabolite/Analog; Endogenous Metabolite

Pathway: Cell Cycle/DNA Damage; Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

In solvent

4°C 2 years -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro DMSO: 7.69 mg/mL (25.87 mM; Need ultrasonic)

H<sub>2</sub>O: 1 mg/mL (3.36 mM; ultrasonic and warming and heat to 80°C)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|-------------------------------|-----------|------------|------------|
|                              | 1 mM                          | 3.3639 mL | 16.8197 mL | 33.6395 mL |
|                              | 5 mM                          | 0.6728 mL | 3.3639 mL  | 6.7279 mL  |
|                              | 10 mM                         | 0.3364 mL | 1.6820 mL  | 3.3639 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: ≥ 0.77 mg/mL (2.59 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.77 mg/mL (2.59 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
  Solubility: 0.77 mg/mL (2.59 mM); Clear solution; Need ultrasonic

### **BIOLOGICAL ACTIVITY**

| Description | N2-methylguanosine is a modified nucleoside that occurs at several specific locations in many tRNA's. |                             |  |
|-------------|---|-----------------------------|--|
| IC & Target | Microbial Metabolite  | Human Endogenous Metabolite |  |

#### **REFERENCES**

| 1]. Ginell SL, et al. Conformatio | n of N2-methylguanosine, a modified nucleoside of tRNA. Biochem Biophys Res Commun. 1978 Oct 30;84(4):886-94. |  |
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