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Produktinformation



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Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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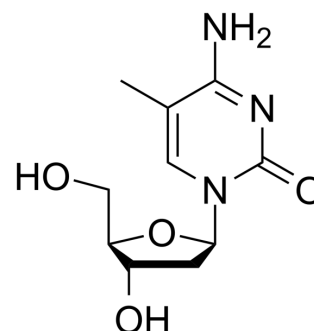
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5-Methyl-2'-deoxycytidine

| | |
|--------------------|--|
| Cat. No.: | HY-W012078 |
| CAS No.: | 838-07-3 |
| Molecular Formula: | C ₁₀ H ₁₅ N ₃ O ₄ |
| Molecular Weight: | 241.24 |
| Target: | DNA Methyltransferase; Endogenous Metabolite |
| Pathway: | Epigenetics; 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 : ≥ 100 mg/mL (414.52 mM)
 H₂O : 100 mg/mL (414.52 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

| Preparing Stock Solutions | Solvent Concentration | Mass | | |
|---------------------------|-----------------------|-----------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| | 1 mM | 4.1452 mL | 20.7262 mL | 41.4525 mL |
| | 5 mM | 0.8290 mL | 4.1452 mL | 8.2905 mL |
| | 10 mM | 0.4145 mL | 2.0726 mL | 4.1452 mL |

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 100 mg/mL (414.52 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (10.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (10.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (10.36 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

5-Methyl-2'-deoxycytidine in single-stranded DNA can act in cis to signal de novo DNA methylation^{[1][2]}.

IC₅₀ & Target

Human Endogenous Metabolite

CUSTOMER VALIDATION

- Nucleic Acids Res. 2021 Oct 29;gkab989.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Christman JK, et al. 5-Methyl-2'-deoxycytidine in single-stranded DNA can act in cis to signal de novo DNA methylation. Proc Natl Acad Sci U S A. 1995 Aug 1;92(16):7347-51.
- [2]. Testillano PS, et al. The 5-methyl-deoxy-cytidine (5mdC) localization to reveal in situ the dynamics of DNA methylation chromatin pattern in a variety of plant organ and tissue cells during development. Physiol Plant. 2013 Sep;149(1):104-13.
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Caution: Product has not been fully validated for medical applications. For research use only.

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