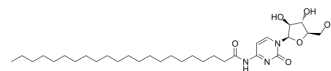


## Enocitabine

<b>Cat. No.:</b>	HY-123523		
<b>CAS No.:</b>	55726-47-1		
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>55</sub> N <sub>3</sub> O <sub>6</sub>		
<b>Molecular Weight:</b>	565.78		
<b>Target:</b>	Nucleoside Antimetabolite/Analog; DNA/RNA Synthesis; CMV		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	H <sub>2</sub> O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)
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### BIOLOGICAL ACTIVITY

<b>Description</b>	Enocitabine is a nucleoside analog, and is a potent DNA replication inhibitor, and a DNA chain terminator. Enocitabine inhibits the replication of human cytomegalovirus. Enocitabine has antileukemic and antiviral activities <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	DNA replication <sup>[1]</sup> ; CMV <sup>[3]</sup>
<b>In Vitro</b>	<p>Enocitabine is resistant to deamination because Enocitabine bears a highly lipophilic group at the 4-amino position of the cytosine moiety of cytarabine<sup>[1]</sup>.</p> <p>The combined effects of Pirarubicin and Enocitabine on HeLa S3 human uterine cervix carcinoma and K562 human myelocytic leukemia cells are determined by enhancement of their cytotoxic activities. Enocitabine or etoposide shows synergistic effects on HeLa S3 and K562 cells<sup>[2]</sup>.</p> <p>In the presence of Enocitabine, triphosphate forms of the nucleoside analogs are detected in the human cytomegalovirus (HCMV)-infected cells, and synthesis of HCMV DNA is strongly suppressed<sup>[3]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

- [1]. Hamada A, et al. Clinical pharmacokinetics of cytarabine formulations. Clin Pharmacokinet. 2002;41(10):705-18.
- [2]. Nagasawa M, et al. In vitro combined effects of pirarubicin (THP) and various antitumor drugs on human tumor cell lines. Gan To Kagaku Ryoho. 1990 Apr;17(4 Pt 1):633-8.
- [3]. Nakamura K, et al. Antiviral effect of antileukemic drugs N4-behenoyl-1-beta-D-arabinofuranosylcytosine (BH-AC) and 2,2'-anhydro-1-beta-D-arabinofuranosylcytosine (cyclo-C) against human cytomegalovirus. J Med Virol. 1990 Jun;31(2):141-7.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA