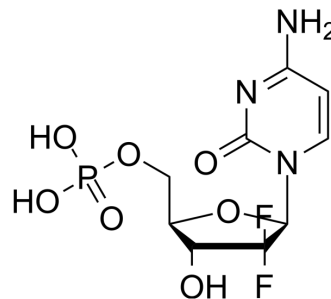


Gemcitabine monophosphate

Cat. No.:	HY-108932
CAS No.:	116371-67-6
Molecular Formula:	C ₉ H ₁₂ F ₂ N ₃ O ₇ P
Molecular Weight:	343.18
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 200 mg/mL (582.78 mM; Need ultrasonic)
H₂O : 100 mg/mL (291.39 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	2.9139 mL	14.5696 mL
	5 mM	0.5828 mL	2.9139 mL	5.8278 mL	
	10 mM	0.2914 mL	1.4570 mL	2.9139 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: ≥ 5 mg/mL (14.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 5 mg/mL (14.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 5 mg/mL (14.57 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Gemcitabine monophosphate (Gemcitabine 5'-phosphate) is one of the active intermediates of [Gemcitabine](#) (HY-17026). Gemcitabine monophosphate shows synergistic anti-cancer effects^{[1][2]}.

REFERENCES

- [1]. Zhang Y, et al. Codelivery of VEGF siRNA and gemcitabine monophosphate in a single nanoparticle formulation for effective treatment of NSCLC. Mol Ther. 2013 Aug;21(8):1559-69.

[2]. Miao L, et al. Nanoparticles with Precise Ratiometric Co-Loading and Co-Delivery of Gemcitabine Monophosphate and Cisplatin for Treatment of Bladder Cancer. Adv Funct Mater. 2014 Nov 12;24(42):6601-6611.

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

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