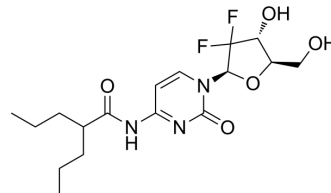


LY2334737

Cat. No.:	HY-13672		
CAS No.:	892128-60-8		
Molecular Formula:	C ₁₇ H ₂₅ F ₂ N ₃ O ₅		
Molecular Weight:	389.39		
Target:	Nucleoside Antimetabolite/Analog; Enterovirus		
Pathway:	Cell Cycle/DNA Damage; Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (256.81 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.5681 mL	12.8406 mL	25.6812 mL
	5 mM	0.5136 mL	2.5681 mL	5.1362 mL
	10 mM	0.2568 mL	1.2841 mL	2.5681 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: ≥ 2.5 mg/mL (6.42 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (6.42 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (6.42 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

LY2334737 is a nucleoside analog and is an orally active proagent of Gemcitabine. LY2334737 exhibits inhibitory activity against enterovirus A71 (EV-A71) infection. LY2334737 has antiviral and anticancer effects^{[1][2]}.

IC₅₀ & Target

Enterovirus A71 (EV-A71)^[2]

In Vitro

Five cell lines that express CES2 responded to LY2334737 treatment. LY2334737 is less cytotoxic to a SK-OV-3 CES2

knockdown than parental cells. The drug response of CES2-transfected HCT-116 cells correlated with CES2 expression level. Bystander studies show statistically greater PC-3-GFP growth inhibition by LY2334737 when cells are cocultured with CES2 and not mock transfectants^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Oral treatment of xenograft models with 3.2 mg/kg LY2334737 once a day for 21 days shows greater tumor growth inhibition of CES2 transfectant than the mock transfectant^[1].

Metronomic LY2334737 administration causes increased blood flow in luciferase-tagged LM2-4 tumor xenografts, and this effect, readily measured using contrast micro-ultrasound, coincided with a relative increase in tumor bioluminescence^[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Sci Rep. 2020 May 18;10(1):8159.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Pratt SE, et al. Human carboxylesterase-2 hydrolyzes the prodrug of gemcitabine (LY2334737) and confers prodrug sensitivity to cancer cells. Clin Cancer Res. 2013 Mar 1;19(5):1159-68.

[2]. Francia G, et al. Low-dose metronomic oral dosing of a prodrug of gemcitabine (LY2334737) causes antitumor effects in the absence of inhibition of systemic vasculogenesis. Mol Cancer Ther. 2012 Mar;11(3):680-9.

[3]. Jialei Sun, et al. Drug Repurposing of Pyrimidine Analogs as Potent Antiviral Compounds Against Human Enterovirus A71 Infection With Potential Clinical Applications. Sci Rep. 2020 May 18;10(1):8159.

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

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