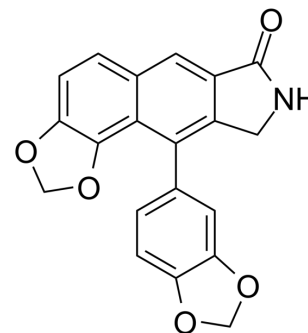


Helioxanthin derivative 5-4-2

Cat. No.:	HY-16679		
CAS No.:	203935-39-1		
Molecular Formula:	C ₂₀ H ₁₃ NO ₅		
Molecular Weight:	347.32		
Target:	HBV		
Pathway:	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 : 50 mg/mL (143.96 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.8792 mL	14.3959 mL	28.7919 mL
	5 mM	0.5758 mL	2.8792 mL	5.7584 mL
	10 mM	0.2879 mL	1.4396 mL	2.8792 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 (7.20 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Helioxanthin derivative 5-4-2 is an analogue of helioxanthin, exhibits significant in vitro anti-HBV activity with EC₅₀ of 0.08 μM in HepG2.2.15 cells. IC₅₀ value: 0.08 μM (EC₅₀) [1][2] Target: Anti-HBV Helioxanthin derivative 5-4-2 had potent anti-HBV activities in HepG2.2.15 cells, with the EC₅₀s of 1 and 0.08 microM, respectively. The lamivudine-resistant HBV, L526M/M550V double mutant strain, was also sensitive to helioxanthin and 5-4-2. This class of compounds not only inhibited HBV DNA, but also decreased HBV mRNA and HBV protein expression. The EC₅₀ of HBV DNA inhibition was consistent with the EC₅₀ of HBV 3.5 Kb transcript inhibition, which was 1 and 0.09 microM for helioxanthin and 5-4-2 respectively.

CUSTOMER VALIDATION

-
- Microorganisms. 2021, 9(3), 471.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Yeo H, et al. Synthesis and antiviral activity of helioxanthin analogues. J Med Chem. 2005 Jan 27;48(2):534-46.
- [2]. Li Y, et al. Inhibition of hepatitis B virus gene expression and replication by helioxanthin and its derivative. Antivir Chem Chemother. 2005;16(3):193-201.
-

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