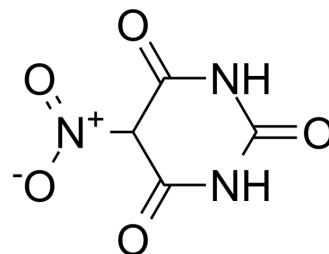


5-Nitrobarbituric acid

Cat. No.:	HY-W002008		
CAS No.:	480-68-2		
Molecular Formula:	C ₄ H ₃ N ₃ O ₅		
Molecular Weight:	173.08		
Target:	HSV		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (577.77 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	5.7777 mL	28.8884 mL	57.7768 mL
		5 mM	1.1555 mL	5.7777 mL	11.5554 mL
10 mM		0.5778 mL	2.8888 mL	5.7777 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (14.44 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (14.44 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	5-Nitrobarbituric acid is a herpes simplex virus type-1 (HSV-1) inhibitor (IC ₅₀ =1.7 μM) ^[1] .
IC₅₀ & Target	HSV-1 1.7 μM (IC ₅₀)
In Vitro	5-Nitrobarbituric acid can inhibit vero cell growth ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Cytotoxicity Assay ^[1]

Cell Line:	Vero cells
Concentration:	0.06-5 μ M
Incubation Time:	2 hours
Result:	Showed high cytotoxicity to vero cells.

REFERENCES

[1]. J V de Julián-Ortiz, et al. Virtual combinatorial syntheses and computational screening of new potential anti-herpes compounds. J Med Chem. 1999 Aug 26;42(17):3308-14.

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