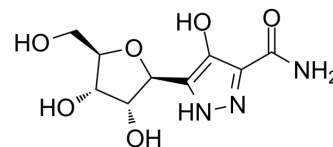


Pyrazofurin

Cat. No.:	HY-122502	
CAS No.:	30868-30-5	
Molecular Formula:	C ₉ H ₁₃ N ₃ O ₆	
Molecular Weight:	259.22	
Target:	DNA/RNA Synthesis	
Pathway:	Cell Cycle/DNA Damage	
Storage:	Powder	-20°C 3 years
	In solvent	-80°C 6 months
		-20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 5 mg/mL (19.29 mM; ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.8577 mL	19.2886 mL	38.5773 mL
	5 mM	0.7715 mL	3.8577 mL	7.7155 mL
	10 mM	0.3858 mL	1.9289 mL	3.8577 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Pyrazofurin, a pyrimidine nucleoside analogue with antineoplastic activity, inhibits cell proliferation and DNA synthesis in cells by inhibiting uridine 5'-phosphate (UMP) synthase^[1]. Pyrazofurin is an active, sensitive orotate-phosphoribosyltransferase inhibitor with IC₅₀s between 0.06-0.37 μM in the three squamous cell carcinoma (SCC) cell lines Hep-2, HNSCC-14B and HNSCC-14C^[2].

REFERENCES

[1]. Ringer DP, et al. Alteration in de novo pyrimidine biosynthesis during uridine reversal of pyrazofurin-inhibited DNA synthesis. *Neuropsychopharmacology. J Biochem Toxicol.* 1991 Spring;6(1):19-27.

[2]. Peters GJ, et al. Antipyrimidine effects of five different pyrimidine de novo synthesis inhibitors in three head and neck cancer cell lines. *Nucleosides Nucleotides Nucleic Acids.* 2018;37(6):329-339.

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

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