Pyrazofurin

Cat. No.: HY-122502

CAS No.: 30868-30-5

Molecular Formula: $C_9H_{13}N_3O_6$

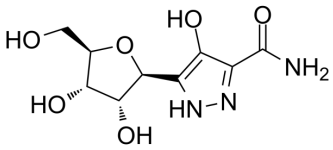
Molecular Weight: 259.22

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

H_2O : 5 mg/mL (19.29 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	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 IC_{50}s 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.

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