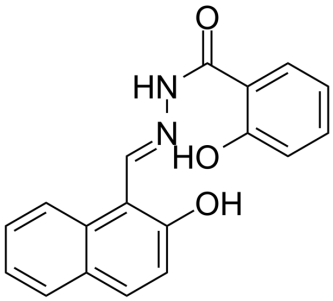
NSAH

Cat. No.:	HY-114503
CAS No.:	1099592-35-4
Molecular Formula:	$C_{18}H_{14}N_2O_3$
Molecular Weight:	306.32
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

DMSO : 62.5 mg/mL (204.03 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.2646 mL	16.3228 mL	32.6456 mL
	5 mM	0.6529 mL	3.2646 mL	6.5291 mL
	10 mM	0.3265 mL	1.6323 mL	3.2646 mL

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

BIOLOGICAL ACTIVITY

Description

NSAH is a reversible and competitive nonnucleoside ribonucleotide reductase (RR) inhibitor, with cell-free IC_{50} of 32 μM and cell-based IC_{50} of ~250 nM, respectively[1].

In Vitro

NSAH depresses dGTP and dATP levels in the dNTP pool causing S-phase arrest, providing evidence for RR inhibition in cells [1].

NSAH (0-10 μM, 2, 6, 24, or 72 h) exhibits potent anti-tumor activity in 3 cancer cell lines[1].

NSAH blocks S-phase progression well to the extent and timing of the decreases in dATP and dGTP[1].

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

Cell Viability Assay[1]

Cell Line:	MDA-231, HCT116 and Panc1 cancer cell lines.
Concentration:	0-10 μM.
Incubation Time:	2, 6, 24, or 72 h.
Result:	Resulted in IC_{50} values ranging from 220 to 500 nM.

REFERENCES

[1]. Md Faiz Ahmad, et al. Potent competitive inhibition of human ribonucleotide reductase by a nonnucleoside small molecule. Proc Natl Acad Sci U S A. 2017 Aug 1;114(31):8241-8246.

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