Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com

DATASHEET

Zebularine

Product overview

Name	Zebularine
Cat No	HB1378
Alternative names	1-(β-D-Ribofuranosyl)-1,2-dihydropyrimidin-2-one; 2-Pyrimidone-1-β-D-riboside; NSC 309132; Zeb
Biological action	Inhibitor
Purity	>99%
Description	DNA methyltransferase inhibitor. Induces cardiomyocyte differentiation in MSCs.

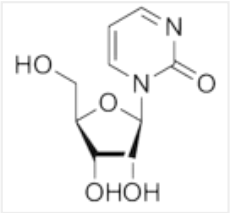
Biological Data

Biological description	DNA methyltransferase inhibitor. Stabilises p53 in colorectal cancer cells and causes p53-dependent ER stress and autophagy. Also inhibits cytidine deaminase and influences embryonic stem cell differentiation. Shows anti-proliferative and anti-cancer actions.

Solubility & Handling

Storage instructions	room temperature (desiccate)
Solubility overview	Soluble in water (100mM) or DMSO (100mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	1-β-D-Ribofuranosyl-2(1*H*)-pyrimidino ne
Molecular Weight	228.2
Chemical structure	
Molecular Formula	$C_9H_{12}N_2O_5$
CAS Number	3690-10-6
PubChem identifier	100016
SMILES	O[C@@H]1[C@@H](CO)O[C@@H](N2C(N=CC=C2)=O)[C@@H]1O
InChiKey	RPQZTTQVRYEKCR-WCTZXXKLSA-N

References

Zebularine inhibits tumorigenesis and stemness of colorectal cancer via p53-dependent endoplasmic reticulum stress.

Yang PM *et al* (2013) Sci Rep 3

PubMedID 24225777

Zebularine regulates early stages of mESC differentiation: effect on cardiac commitment.

Horrillo A *et al* (2013) Cell Death Dis 4
PubMedID 23559004

Potent inhibitors for the deamination of cytosine arabinoside and 5-aza-2'-deoxycytidine by human cytidine deaminase.

Lalibertā? J *et al* (1992) Cancer Chemother Pharmacol 30(1)
PubMedID 1375134