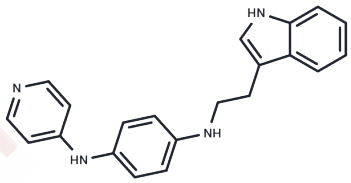
Data Sheet (Cat.No.T2243)

TargetMol

Serdemetan

Chemical Properties



CAS No. : 881202-45-5

Formula: C21H20N4

Molecular Weight: 328.41

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Serdemetan (JNJ-26854165) is an orally bioavailable HDM2 antagonist with potential antineoplastic activity.
Targets(IC50)	Apoptosis,Mdm2,E1/E2/E3 Enzyme,p53
In vitro	In both solid and ALL transplant tumor models, oral administration of JNJ-26854165 (20 mg/kg) significantly altered EFS distribution.
In vivo	In leukemia cell lines, JNJ-26854165 inhibits cell growth and induces apoptosis, demonstrating inhibitory effects on OCI-AML-3 (IC50=0.24 μM), MOLM-13 (IC50=0.33 μM), NALM-6 (IC50=0.32 μM), and REH (IC50=0.44 μM). Additionally, it inhibits cell proliferation in various human cancer cell lines (H460, A549, p53-WT-HCT116, and p53-null-HCT116).
Cell Research	Cell lines are maintained in RPMI 1640 medium containing 10% heat-inactivated fetal calf serum (FCS). OCI-AML-3, MOLM-13, NB4 and U937 cells are derived from acute myelogenous leukemia (AML) patients, K562 from a chronic myelogenous leukemia (CML) patient in blast crisis, and NALM-6, REH, P12-ICHIK(Only for Reference)

Solubility Information

Solubility	Ethanol: 2 mg/mL (6.09 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 50 mg/mL (152.25 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.045 mL	15.2249 mL	30.4497 mL
5 mM	0.609 mL	3.045 mL	6.0899 mL
10 mM	0.3045 mL	1.5225 mL	3.045 mL
50 mM	0.0609 mL	0.3045 mL	0.609 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Kojima K, et al. Mol Cancer Ther. 2010, 9(9), 2545-2557.
Liu Z, Chen Y, Gao H, et al. Berberine Inhibits Cell Proliferation by Interfering with Wild-Type and Mutant P53 in Human Glioma Cells. OncoTargets and Therapy. 2020, 13: 12151-12162.
Yuan Y, et al. J Hematol Oncol. 2011, 4:16.
Chargari C, et al. Cancer Lett. 2011, 312(2), 209-218.
Smith MA, et al. Pediatr Blood Cancer, 2012, 59(2), 329-332.
Liu Z, Chen Y, Gao H, et al. Berberine Inhibits Cell Proliferation by Interfering with Wild-Type and Mutant P53 in Human Glioma Cells[J]. OncoTargets and Therapy . 2020, 13: 12151-12162.