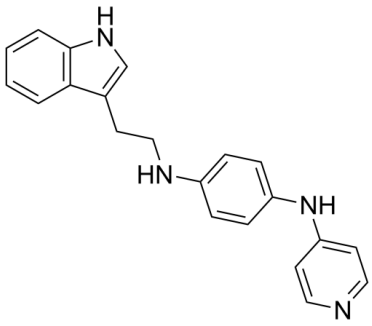
Data Sheet

Product Name:	Serdemetan
Cat. No.:	CS-0166
CAS No.:	881202-45-5
Molecular Formula:	$C_{21}H_{20}N_4$
Molecular Weight:	328.41
Target:	Apoptosis; E1/E2/E3 Enzyme; MDM-2/p53
Pathway:	Apoptosis; Metabolic Enzyme/Protease
Solubility:	DMSO : 50 mg/mL (ultrasonic)



BIOLOGICAL ACTIVITY:

Serdemetan (JNJ-26854165) is a potent **anticancer** agent with radiosensitizing activity. Serdemetan exhibits antiproliferative activity in various **p53** wild-type tumor cells. Serdemetan also antagonizes the **Mdm2-HIF1α** axis leading to decreased levels of glycolytic enzymes[1][2][3]. ***In Vitro:***Serdemetan (0.5-50 μM; 48-72 h) inhibits cell proliferation of H460, A549, p53-WT HCT116, p53-null HCT116 and HMEC-1 cells in a dose-dependent manner[1].
Serdemetan (0.25-5 μM; 48 h) triggers cell arrests in G2/M phase of A549 cells and H460 cells[1].
Serdemetan (0.5-10 μM; 48 h) increases expression of p53 and p21 in H460, A549 and p53-WT HCT116 cells[1].
Serdemetan (0.25-10 μM; 12-14 d) affects clonogenic survival in H460, A549 p53-WT HCT116 and p53-null HCT116 cells[1].
Serdemetan (0.25-5 μM; 12-14 d) increases radiation-induced clonogenic inhibition[1].
Serdemetan (5-20 μM; 4-24 h) inhibits neovessels formation and delays scratch wound repair of HMEC-1 cells[1].
In Vivo:Serdemetan (50 mg/kg) enhances radiation-induced growth delays in H460 and A549 xenograft tumors[1].

References:

[1]. Chargari C, et, al. Preclinical assessment of JNJ-26854165 (Serdemetan), a novel tryptamine compound with radiosensitizing activity in vitro and in tumor xenografts. Cancer Lett. 2011 Dec 22;312(2):209-18.

[2]. Lehman JA, et, al. Serdemetan antagonizes the Mdm2-HIF1α axis leading to decreased levels of glycolytic enzymes. PLoS One. 2013 Sep 6;8(9):e74741.

[3]. Jones RJ, et, al. The novel anticancer agent JNJ-26854165 induces cell death through inhibition of cholesterol transport and degradation of ABCA1. J Pharmacol Exp Ther. 2013 Sep;346(3):381-92.

CAIndexNames:

1,4-Benzenediamine, N1-[2-(1H-indol-3-yl)ethyl]-N4-4-pyridinyl-

SMILES:

C1(NCCC2=CNC3=C2C=CC=C3)=CC=C(C=C1)NC4=CC=NC=C4

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

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