Indimitecan

Cat. No.: HY-18350

CAS No.: 915360-05-3

Molecular Formula: $C_{25}H_{21}N_3O_6$

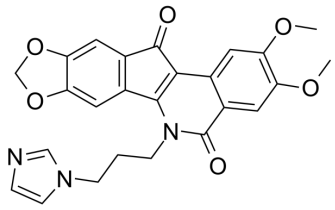
Molecular Weight: 459.45

Target: Topoisomerase

Pathway: Cell Cycle/DNA Damage

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 8.33 mg/mL (18.13 mM; ultrasonic and warming and adjust pH to 3 with HCl and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1765 mL	10.8826 mL	21.7652 mL
	5 mM	0.4353 mL	2.1765 mL	4.3530 mL
	10 mM	0.2177 mL	1.0883 mL	2.1765 mL

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

BIOLOGICAL ACTIVITY

Description

Indimitecan (LMP776) is a topoisomerase I (Top1) inhibitor with anticancer activities[1].

IC_{50} & Target

Top1

In Vitro

Indimitecan (LMP776) (0-100 μM) shows antiproliferative potencies against various human cancer cell lines, with mean-graph midpoint (MGM) of 0.079 ± 0.023 μM[1].

Indimitecan shows potent DNA cleavage due to Top1 inhibition[1].

Indimitecan can be substrates for metabolic ketone reductases[1].

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

Cell Proliferation Assay[1]

Cell Line:	HOP-62, HCT-116, SF-539, UACC-62, OVCAR-3, SN12C, DU-145, MCF-7
Concentration:	0-100 μM

Incubation Time:	
Result:	Showed growth inhibition with GI_{50}s of <0.01, <0.01, 0.04, <0.01, 0.08, <0.01, <0.01 and 0.01 μM against HOP-62, HCT-116, SF-539, UACC-62, OVCAR-3, SN12C, DU-145 and MCF-7 cells, respectively. And the mean-graph midpoint (MGM) for growth inhibition of all human cancer cell lines successfully tested (the National Cancer Institute's developmental therapeutics assay (the "NCI60")) was 0.079 ± 0.023 μM.

REFERENCES

[1]. Cinelli MA, et al. Identification, synthesis, and biological evaluation of metabolites of the experimental cancer treatment drugs indotecan (LMP400) and indimitecan (LMP776) and investigation of isomerically hydroxylated indenoisoquinoline analogues as to

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