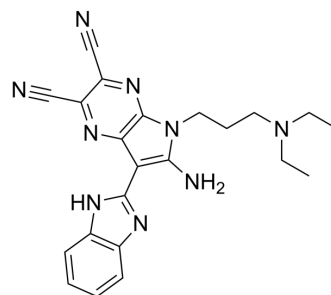


## Topoisomerase II inhibitor 13

Cat. No.:	HY-153401		
CAS No.:	451515-89-2		
Molecular Formula:	C <sub>22</sub> H <sub>23</sub> N <sub>9</sub>		
Molecular Weight:	413.48		
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 : 12.5 mg/mL (30.23 mM; Need ultrasonic and warming)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4185 mL	12.0925 mL	24.1850 mL
	5 mM	0.4837 mL	2.4185 mL	4.8370 mL
	10 mM	0.2418 mL	1.2092 mL	2.4185 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Topoisomerase II inhibitor 13 is a topoisomerase II (Topo II) inhibitor. Topoisomerase II inhibitor 13 shows antiproliferative activity against several cancer cells. Topoisomerase II inhibitor 13 induces cancer cells apoptosis<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

Topoisomerase II

#### In Vitro

Topoisomerase II inhibitor 13 (compound 3m) (20 μM, 50 μM) exerts strong inhibitory effect at 20 μM, and almost completely inhibits Topo II activity<sup>[1]</sup>.

Topoisomerase II inhibitor 13 inhibits cancer cells proliferation with IC<sub>50</sub>s of 25.85 μM (MDA-MB-231), 1.82 μM (A549), 10.38 μM (K562), 1.73 μM (Raji), 1.23 μM (HL-60), and 0.87 μM (HL-60/MX2), respectively<sup>[1]</sup>.

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

### REFERENCES

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[1]. Li P H, et al. Synthesis and mechanism studies of 1, 3-benzoazolyl substituted pyrrolo [2, 3-b] pyrazine derivatives as nonintercalative topoisomerase II catalytic inhibitors. Journal of Medicinal Chemistry, 2016, 59(1): 238-252.

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

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