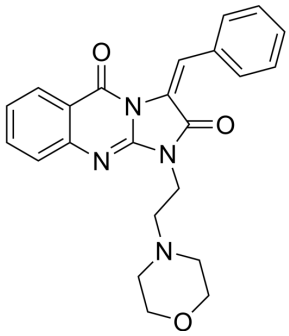
Topoisomerase I inhibitor 12

Cat. No.:	HY-161082
Molecular Formula:	$C_{23}H_{22}N_4O_3$
Molecular Weight:	402.45
Target:	Topoisomerase
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Topoisomerase I inhibitor 12 (compound 12), a Camptothecin (HY-16560)-based derivative, is a potent Topoisomerase I inhibitor. Topoisomerase I inhibitor 12 shows anticancer activity[1].
IC_{50} & Target	Topoisomerase I
In Vitro	Topoisomerase I inhibitor 12 (compound 12) shows moderate antiproliferative activity against the MDA-MB-231, DU-145, HCT-116, SKOV-3, and SAOS-2 cancer cell lines (with IC_{50} values of 5.96±0.03, 3.81±1.37, 3.67±0.21, 3.48±1.02, and 3.20±0.21 μM, respectively), as well as potent activity against the HOS (osteosarcoma) cancer cell line (IC_{50}=1.47 μM) while the potential of Topoisomerase I inhibitor 12 against fibroblast normal cells (BJ1) demonstrated a 2.89-fold selectivity (IC_{50} =4.25 μM) against cancer cell[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ahmed I. Khodair, et al. Camptothecin structure simplification elaborated new imidazo[2,1-b]quinazoline derivative as a human topoisomerase I inhibitor with efficacy against bone cancer cells and colon adenocarcinoma. European Journal of Medicinal Chemistry. 16 December 2023, 116049.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA