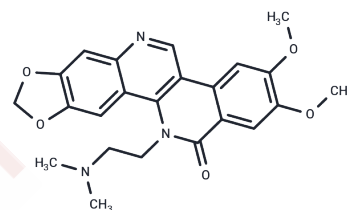


## Topovale

## Chemical Properties

CAS No. :	500214-53-9
Formula:	C <sub>23</sub> H <sub>23</sub> N <sub>3</sub> O <sub>5</sub>
Molecular Weight:	421.45
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Topovale (ARC111) is a potent inhibitor of topoisomerase I. Topovale inhibits hypoxia-mediated accumulation of hypoxia-inducible factor-1alpha. Topovale exhibited low nM cytotoxicity against a panel of cancer cells. Topovale cytotoxicity as well as Topovale-induced apoptosis was reduced > 100-fold in CPT-resistant topoisomerase I (TOP1)-deficient P388/CPT45 cells as compared with P388 cells.
Targets(IC50)	Topoisomerase

## Solubility Information

Solubility	DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3728 mL	11.8638 mL	23.7276 mL
5 mM	0.4746 mL	2.3728 mL	4.7455 mL
10 mM	0.2373 mL	1.1864 mL	2.3728 mL
50 mM	0.0475 mL	0.2373 mL	0.4746 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Zhou W, Dai Z, Chen Y, Wang H, Yuan Z. High-Dimensional descriptor selection and computational QSAR modeling for antitumor activity of ARC-111 analogues Based on Support Vector Regression (SVR). *Int J Mol Sci.* 2012;13(1): 1161-72. doi: 10.3390/ijms13011161. PubMed PMID: 22312310; PubMed Central PMCID: PMC3269744.

Li TK, Houghton PJ, Desai SD, Daroui P, Liu AA, Hars ES, Ruchelman AL, LaVoie EJ, Liu LF. Characterization of ARC-111 as a novel topoisomerase I-targeting anticancer drug. *Cancer Res.* 2003 Dec 1;63(23):8400-7. PubMed PMID: 14679002.

Feng W, Satyanarayana M, Tsai YC, Liu AA, Liu LF, LaVoie EJ. Novel topoisomerase I-targeting antitumor agents synthesized from the N,N,N-trimethylammonium derivative of ARC-111, 5H-2,3-dimethoxy-8,9-methylenedioxy-5-[(2-N,N,N-trimethylammonium)ethyl]dibenzo[c,h][1,6]naphthyridin-6-one iodide. *Eur J Med Chem.* 2009 Sep;44(9): 3433-8. doi: 10.1016/j.ejmech.2009.02.004. PubMed PMID: 19299037; PubMed Central PMCID: PMC2766012.

Kurtzberg LS, Battle T, Rouleau C, Bagley RG, Agata N, Yao M, Schmid S, Roth S, Crawford J, Krumbholz R, Ewesuedo R, Yu XJ, Wang F, Lavoie EJ, Teicher BA. Bone marrow and tumor cell colony-forming units and human tumor xenograft efficacy of noncamptothecin and camptothecin topoisomerase I inhibitors. *Mol Cancer Ther.* 2008 Oct;7(10):3212-22. doi: 10.1158/1535-7163.MCT-08-0568. PubMed PMID: 18852125.

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