RI-2

Cat. No.:	HY-16904		
CAS No.:	1417162-36-7		
Molecular Formula:	C ₂₁ H ₁₈ Cl ₂ N ₂ O ₄		
Molecular Weight:	433		
Target:	RAD51		
Pathway:	Cell Cycle/DNA Damage		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year

SOLVENT & SOLUBILITY

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	2.3095 mL	11.5473 mL	23.0947 ml	
	5 mM	0.4619 mL	2.3095 mL	4.6189 mL	
		10 mM	0.2309 mL	1.1547 mL	2.3095 mL

BIOLOGICAL ACTIVITY			
Description	RI-2 is a reversible RAD51 inhibitor, with an IC ₅₀ of 44.17 μM, and specifically inhibits homologous recombination repair in human cells.		
IC_{50} & Target	IC50: 44.17 μM (RAD51) ^[1]		
In Vitro	RI-2 (7a) is a reversible RAD51 inhibitor, with an IC ₅₀ of 44.17 μM. RI-2 specifically inhibits homologous recombination repair in human cells. RI-2 (150 μM) induces a significant sensitization of cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

PROTOCOL)
Cell Assay ^[1]	HEK293 cells are plated into 96-well tissue culture plates at a density of 300 cells per well in the presence or absence of 50 nM mitomycin C (MMC) for 24 hours at 37°C, 5% CO ₂ . Media is subsequently replaced with fresh media containing 0.5%

Product Data Sheet

Cl

CI

0



DMSO plus RI-2 for an additional 24 hours. RI-2 is then removed, and cultures are allowed to grow to a 50-70% confluence. Average survival from at least three replicates is measured using CellGlo reagentor. RI-2 is deemed successful in sensitizing cells to MMC if they generate significantly greater toxicity in the presence of MMC relative to the absence of MMC. Specifically, sensitization is scored as a "+" when non-overlapping standard errors are observed for at least two pairs of compound doses^[1].

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REFERENCES

[1]. Budke B, et al. An optimized RAD51 inhibitor that disrupts homologous recombination without requiring Michael acceptor reactivity. J Med Chem. 2013 Jan 10;56(1):254-63.

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

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