

Product Data Sheet

RAD51-IN-1

Cat. No.:HY-122705CAS No.:2101739-18-6Molecular Formula: $C_{22}H_{16}ClN_3O$ Molecular Weight:373.83Target:RAD51

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: 62.5 mg/mL (167.19 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6750 mL	13.3751 mL	26.7501 mL
	5 mM	0.5350 mL	2.6750 mL	5.3500 mL
	10 mM	0.2675 mL	1.3375 mL	2.6750 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.56 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

RAD51-IN-1, a derivative of B02, is a potent inhibitor of RAD51. RAD51-IN-1 can be used for cancer research^[1].

In Vitro

RAD51 is a vital component of the homologous recombination DNA repair pathway and is overexpressed in drug-resistant cancers, including aggressive triple-negative breast cancer (TNBC)^[1].

RAD51-IN-1 (10 μ M) decreases the ratio of RAD51 positive cells/cH2AX positive cells in MDA-MB-231 cell exposure to 6 Gy irradiation^[1].

 $RAD51\text{-}IN\text{-}1\ (10\ \mu\text{M})\ significantly\ inhibits\ DNA\ damage\ induced\ RAD51\ foci\ formation\ with\ 6\ Gy\ irradiation^{[1]}.$

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

REFERENCES

1]. Ambber Ward, et al. Quina	zolinone derivatives as inhibito	ors of homologous recombinas	e RAD51. Bioorg Med Chem Lett. 2017 Jul 1	5;27(14):3096-3100.
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