

MSC778

## Chemical Properties

CAS No. :	3098173-17-9
Formula:	C <sub>22</sub> H <sub>20</sub> ClN <sub>3</sub> O <sub>5</sub>
Molecular Weight:	441.87
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	MSC778 is a selective and orally active inhibitor of flap endonuclease 1 (FEN1), with an IC <sub>50</sub> of 3 nM and a K <sub>D</sub> of 2.9 nM. It exhibits 145-fold, 516-fold, and 65-fold selectivity over EXO1, GEN1, and XPG, respectively. MSC778 selectively targets BRCA2-deficient cells and enhances the tumor-stalling activity of Niraparib in BRCA2 KO DLD-1 mouse xenografts. It is applicable in colorectal cancer research.
Targets(IC <sub>50</sub> )	FLAP
In vitro	MSC778 selectively eradicates BRCA2 knockout DLD-1 cells over a seven-day period, with an apparent EC <sub>50</sub> of 210 nM. The protein binding-adjusted free EC <sub>50</sub> (EC <sub>50,ub</sub> ) is 11 nM.
In vivo	MSC778 (100 mg/kg, oral gavage, twice daily for 28 days) enhanced the tumor-suppressing activity of Niraparib in a mouse colorectal cancer xenograft model.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2631 mL	11.3155 mL	22.6311 mL
5 mM	0.4526 mL	2.2631 mL	4.5262 mL
10 mM	0.2263 mL	1.1316 mL	2.2631 mL
50 mM	0.0453 mL	0.2263 mL	0.4526 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481