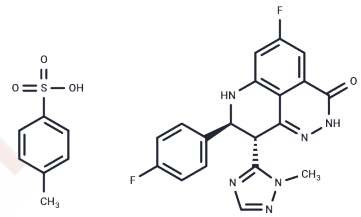
# Data Sheet (Cat.No.T16979)

TargetMol

## Talazoparib tosylate

### Chemical Properties



CAS No. : 1373431-65-2

Formula: C26H22F2N6O4S

Molecular Weight: 552.55

Storage: Store at low temperature
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 | Talazoparib tosylate (BMN 673ts) is an orally active and highly potent PARP1/2 inhibitor with antitumor activity for the study of specific breast cancers. |
| Targets(IC50) | PARP |
| In vitro | Talazoparib tosylate had similar inhibitory effects on PARP1 and PARP2 (Ki values of 1.20 nM and 0.85 nM, respectively). Talazoparib tosylate induced the formation of an intranuclear γ-H2AX focus at concentrations as low as 100 pM. Talazoparib tosylate had no effect on PARG activity at concentrations up to 1 μM. The dissociation constant for binding of Talazoparib tosylate to PARP1 was 0.29 nM. Talazoparib tosylate selectively targets tumor cells with defects in the BRCA1, BRCA2 or PTEN genes with 20- to 200-fold greater potency than existing PARP1/2 inhibitors. Talazoparib tosylate specifically targets tumor cells with defects in homologous recombination genes, and tumor models with defects in BRCA1 or BRCA2 defective tumor models are extremely sensitive to Talazoparib tosylate. [1] |
| In vivo | Talazoparib tosylate has high oral bioavailability, with absolute bioavailability exceeding 40% when administered orally in rats using carboxymethylcellulose as the vehicle. Talazoparib tosylate has significant antitumor effects when administered orally; Talazoparib tosylate exhibits high potency sensitivity in transplanted tumors with impaired DNA repair due to BRCA mutations or PTEN defects when administered at well-tolerated doses in mice. [1] |

### Solubility Information

| | |
|---|---|
| Solubility | H2O: < 0.1 mg/mL (insoluble)<br>DMSO: 100 mg/mL (180.98 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (7.24 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.8098 mL | 9.049 mL | 18.0979 mL |
| 5 mM | 0.362 mL | 1.8098 mL | 3.6196 mL |
| 10 mM | 0.181 mL | 0.9049 mL | 1.8098 mL |
| 50 mM | 0.0362 mL | 0.181 mL | 0.362 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

Shen Y, et al. BMN 673, a novel and highly potent PARP1/2 inhibitor for the treatment of human cancers with DNA repair deficiency. Clin Cancer Res. 2013 Sep 15;19(18):5003-15.