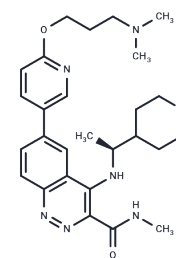


## ATM Inhibitor-1

## Chemical Properties

CAS No. :	2135639-94-8
Formula:	C <sub>27</sub> H <sub>36</sub> N <sub>6</sub> O <sub>3</sub>
Molecular Weight:	492.61
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	ATM Inhibitor-1 is a highly potent, selective, and orally active ATM inhibitor (IC <sub>50</sub> : 0.7 nM) with anti-tumor activity. It exhibits weak activity against mTOR (IC <sub>50</sub> , 21 μM), DNAPK (IC <sub>50</sub> , 2.8 μM), PI3Kα (IC <sub>50</sub> , 3.8 μM), PI3Kβ (IC <sub>50</sub> , 10.3 μM), PI3Kγ (IC <sub>50</sub> , 3 μM), and PI3Kδ (IC <sub>50</sub> , 0.73 μM).
Targets(IC <sub>50</sub> )	ATM/ATR
In vitro	In cellular assays, ATM Inhibitor-1 (Compound 21) exhibits IC <sub>50</sub> s of 2.8 nM, >30 μM and >19 μM for ATM, ATR/PI3Kα and PI3Kβ/mTOR, respectively.
In vivo	ATM Inhibitor-1 (50 mg/kg p.o. once daily for 3 days every week starting 24 h post-irinotecan dosing, 21 days) in combination with 50 mg/kg irinotecan significantly reduces tumor growth in SW620 mice model.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.030 mL	10.150 mL	20.300 mL
5 mM	0.406 mL	2.030 mL	4.060 mL
10 mM	0.203 mL	1.015 mL	2.030 mL
50 mM	0.0406 mL	0.203 mL	0.406 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

Barlaam B, et al. Discovery of a Series of 3-Cinnoline Carboxamides as Orally Bioavailable, Highly Potent, and Selective ATM Inhibitors. CS Med Chem Lett. 2018 Jul 13;9(8):809-814.

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

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