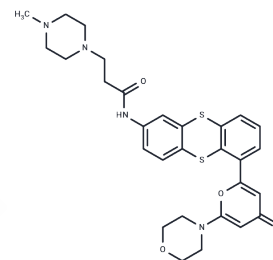


KU 59403

## Chemical Properties

CAS No. : 845932-30-1  
Formula: C<sub>29</sub>H<sub>32</sub>N<sub>4</sub>O<sub>4</sub>S<sub>2</sub>  
Molecular Weight: 564.72  
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	KU 59403 is a selective and potent ATM inhibitor with antitumor and anticancer activity, inhibits ATM, DNA-PK and PI3K, and is often used in combination therapy with PARP or ATR inhibitors to slow the progression of cancer.
Targets(IC50)	ATM/ATR
In vitro	In LoVo, HCT116, and SW620, U2OS, and MDA-MB-231 cells, KU 59403 (1 μM; 16 hours) exhibited at least 1000-fold specificity for ATM over other tested members of the PI3K family[1].
In vivo	KU59403 at a daily dose of 12.5 mg/kg induces sensitization, while increasing the dose to 25 mg/kg twice daily results in the greatest chemo-sensitisation. Without significantly increased toxicity, it exhibits a 3-fold increase in BMY-40481-induced tumor growth delay in SW620 and HCT116-N7 xenografts [1].

## Solubility Information

Solubility	DMSO: 5 mg/mL (8.85 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.7708 mL	8.8539 mL	17.7079 mL
5 mM	0.3542 mL	1.7708 mL	3.5416 mL
10 mM	0.1771 mL	0.8854 mL	1.7708 mL
50 mM	0.0354 mL	0.1771 mL	0.3542 mL

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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

Batey MA, et al. Preclinical evaluation of a novel ATM inhibitor, KU59403, in vitro and in vivo in p53 functional and dysfunctional models of human cancer. *Mol Cancer Ther.* 2013 Jun;12(6):959-67.

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