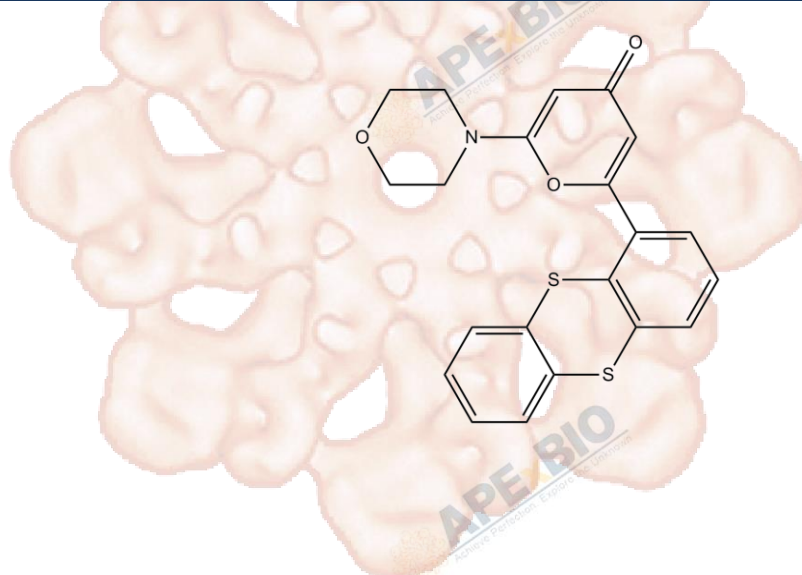


# Product Data Sheet

## KU 55933

<b>Cat. No.:</b>	A4605
<b>CAS No.:</b>	587871-26-9
<b>Formula:</b>	C <sub>21</sub> H <sub>17</sub> NO <sub>3</sub> S <sub>2</sub>
<b>M.Wt:</b>	395.49
<b>Synonyms:</b>	
<b>Target:</b>	DNA Damage/DNA Repair
<b>Pathway:</b>	ATM/ATR
<b>Storage:</b>	Desiccate at -20°C



### Solvent & Solubility

≥41.67 mg/mL in DMSO with gentle warming; insoluble in H<sub>2</sub>O; insoluble in EtOH

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		2.5285 mL	12.6425 mL	25.2851 mL
	5 mM		0.5057 mL	2.5285 mL	5.0570 mL
	10 mM		0.2529 mL	1.2643 mL	2.5285 mL

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

### Biological Activity

Shortsummary

ATM inhibitor, potent and selective

IC<sub>50</sub> & Target

13 nM (ATM), 2.2 nM (Ki) (ATM)

In Vitro

#### Cell Viability Assay

Cell Line:	MCF-7 cells
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	10 μM, 72 hours

	Applications:	The effect of KU-55933 on viable cell number was measured by counting cells able to exclude Trypan blue. Cell number was significantly reduced by KU-55933. Lactate production was significantly increased in cells treated with KU-55933. Glucose consumption was increased with exposure to KU-55933 treated cells. KU-55933 also decreased ATP levels in MCF-7 cells.
In Vivo	<b>Animal experiment</b>	
	Applications:	
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

## Product Citations

1. Inna Ricardo-Lax, Karin Broennimann, et al. "A short HBV RNA region induces RNR-R2 expression in non-cycling cells and in primary human hepatocytes." bioRxiv. 2018 October 31.

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

[1] Zakikhani M, Bazile M, Hashemi S, et al. Alterations in cellular energy metabolism associated with the antiproliferative effects of the ATM inhibitor KU-55933 and with metformin. PloS one, 2012, 7(11): e49513.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

**APExBIO Technology**

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