

Store at
-20°C
#83346**KU-55933**

5 mg


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For Research Use Only. Not for Use in Diagnostic Procedures.**Background**

KU-55933 is a potent and selective ATP-competitive inhibitor of ATM kinase ($IC_{50} = 13$ nM and $K_i = 2.2$ nM). This small molecule has been shown to sensitize cancer cells to ionizing radiation and chemotherapeutic agents (1). Treating senescent cancer cells (MCF7, A549, and HCT 116) with KU-55933 results in decreased viability and cell death (2). KU-55933 has neuroprotective capabilities by preventing damage caused by oxidative stress (3).

Molecular Formula $C_{21}H_{17}NO_3S_2$ **Molecular Weight**

395.5 g/mol

Purity

>98%

CAS

587871-26-9

Solubility

Soluble in DMSO at 40 mg/ml or ethanol at 20 mg/ml.

Storage

Store lyophilized at -20°C , desiccated. In lyophilized form, the chemical is stable for 24 months. Once in solution, store at -20°C and use within 1 month to prevent loss of potency. *Aliquot to avoid multiple freeze/thaw cycles.*

Directions for Use

KU-55933 is supplied as a lyophilized powder. For a 10 mM stock, reconstitute 5 mg of powder in 1.26 ml of DMSO. Working concentrations and length of treatment can vary depending on the desired effect.

Background References

1. Hickson, I. et al. (2004) *Cancer Res* 64, 9152-9.
2. Crescenzi, E. et al. (2008) *Clin Cancer Res* 14, 1877-87.
3. Chwastek, J. et al. (2017) *Int J Biochem Cell Biol* 87, 38-53.

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