

Store at
-20°C**KU-55933****#83346**

5 mg


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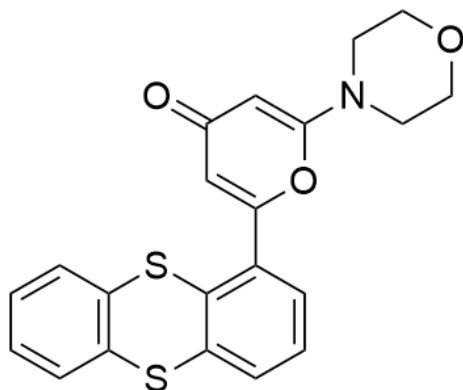
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New 12/19

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: $C_{21}H_{17}NO_3S_2$

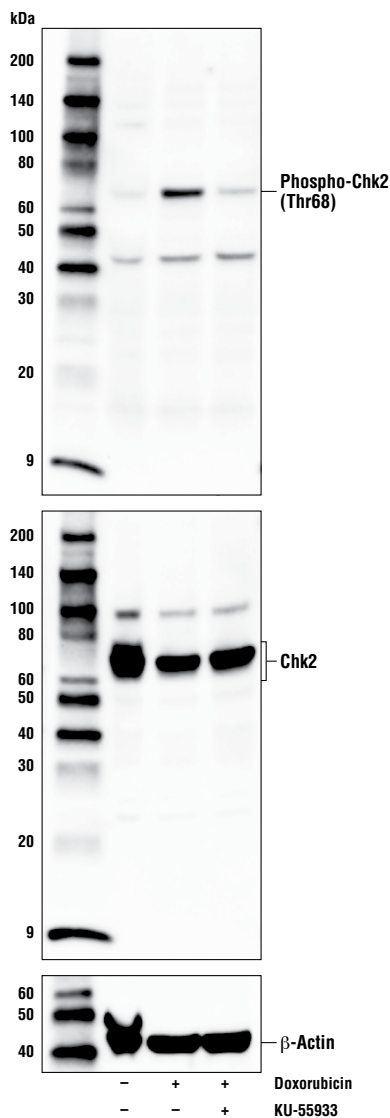


Molecular Weight: 395.5 g/mol

Purity: >98%

CAS: 587871-26-9

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



Western blot analysis of extracts from HCT 116 cells, untreated (-) or treated with Doxorubicin #5927 (0.5 μ M, 24 hr; +), either with or without KU-55933 pretreatment (10 μ M, 1 hr; +), using Phospho-Chk2 (Thr68) (C13C1) Rabbit mAb #2197 (upper), Chk2 (D9C6) XP® Rabbit mAb #6334 (middle), and β -Actin (D6A8) Rabbit mAb #8457 (lower).

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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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide **Species Cross-Reactivity:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected *Species enclosed in parentheses are predicted to react based on 100% homology.*