

Product Name	: KU-60019
Synonyms	: KU60019;KU 60019
Cat No.	: M16633
CAS Number	: 925701-46-8
Molecular Formula	: C30H33N3O5S
Formula Weight	: 547.67
Chemical Name	: 4-Morpholineacetamide, 2,6-dimethyl-N-[5-[6-(4-morpholinyl)-4-oxo-4H-pyran-2-yl]-9H-thioxanthen-2-yl]-, (2R,6S)-rel-
Description	KU-60019 is an improved analogue of KU-55933, and is a potent, specific inhibitor of ATM kinase with IC₅₀ of 6.3 nM, 270- and 1,600-fold selectivity over DNA-PKcs and ATR; blocks radiation-induced phosphorylation of key ATM targets in human glioma cells, which is 10-fold more effective than KU-55933, reduces basal S473 AKT phosphorylation and inhibits glioma cell migration and invasion in vitro; preferentially sensitizes p53-mutant glioma to ionizing radiation in orthotopic xenograft models of GBM.
Pathway	: Cell Cycle/DNA Damage
Target	: ATM/ATR
Receptor	: ATM/ATR
Solubility	: DMSO: ≥ 30 mg/mL
SMILES	: <chem>CC1CN(CC(O1)C)CC(=O)NC2=CC3=C(C=C2)SC4=C(C3)C=CC=C4C5=CC(=O)C=C(O5)N6CCOCC6</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Golding SE, et al. Mol Cancer Ther. 2009 Oct;8(10):2894-902. | 2. Gamper AM, et al. J Biol Chem. 2012 Apr 6;287(15):12445-54. | 3. Biddlestone-Thorpe L, et al. Clin Cancer Res. 2013 Jun 15;19(12):3189-200. | 4. Golding SE, et al. Cell Cycle. 2012 Mar 15;11(6):1167-73.