

Product Name: KU 60019

Catalog No.: 4176

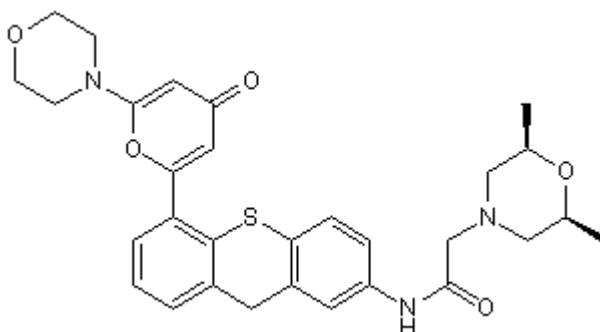
Batch No.: 1

CAS Number: 925701-46-8

IUPAC Name: (2*R*,6*S*-rel)-2,6-Dimethyl-*N*-[5-[6-(4-morpholinyl)-4-oxo-4*H*-pyran-2-yl]-9*H*-thioxanthen-2-yl]-4-morpholineacetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₀H₃₃N₃O₅S.H₂O
Batch Molecular Weight: 565.69
Physical Appearance: Yellow solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.33 (Ethyl acetate:Methanol [92:8])
HPLC: Shows 98.4% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	63.7	6.24	7.43
Found	63.72	6.13	7.38

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: KU 60019

Catalog No.: 4176

Batch No.: 1

CAS Number: 925701-46-8

IUPAC Name: (2*R*,6*S*-rel)-2,6-Dimethyl-*N*-[5-[6-(4-morpholinyl)-4-oxo-4*H*-pyran-2-yl]-9*H*-thioxanthen-2-yl]-4-morpholineacetamide

Description:

Potent ATM kinase inhibitor (IC₅₀ = 6.3 nM). Exhibits little to no nonspecific target effects against a panel of 229 protein kinases; displays similar target selectivity to KU 55933 (Cat. No. 3544). Inhibits migration and invasion of human glioma cells in vitro.

Physical and Chemical Properties:

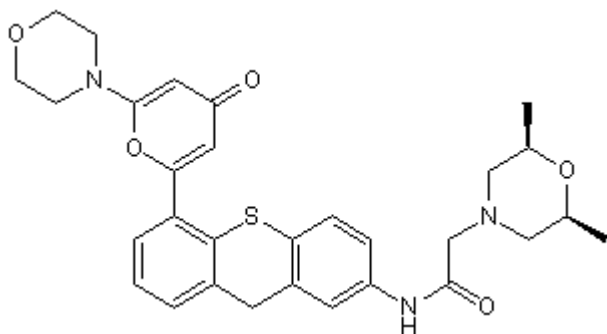
Batch Molecular Formula: C₃₀H₃₃N₃O₅S.H₂O

Batch Molecular Weight: 565.69

Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Golding et al (2009) Improved ATM kinase inhibitor KU-60019 radiosensitizes glioma cells, compromises insulin, AKT and ERK prosurvival signaling, and inhibits migration and invasion. *Mol.Cancer Ther.* **8** 2894. PMID: 19808981.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use