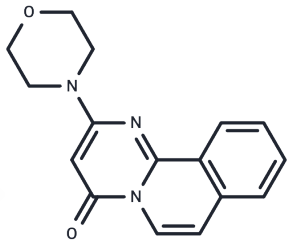
Data Sheet (Cat.No.T3586)

TargetMol

Compound 401

Chemical Properties



CAS No. : 168425-64-7

Formula: C16H15N3O2

Molecular Weight: 281.31

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Compound 401 (2-morpholino-4H-pyrimido[2,1-a]isoquinolin-4-one) is a synthetic DNA-PK inhibitor (IC50 = 0.28 μM) that also targets mTOR but not PI3K.
Targets(IC50)	DNA-PK
In vitro	Compound 401 shows activity against mTOR (IC50 = 5.3 μM) but not p110α/p85α PI3K (IC50 > 100 μM). Treatment of cells with Compound 401 blocks the phosphorylation of sites modified by mTOR-Raptor and mTOR-Rictor complexes (ribosomal protein S6 kinase 1 Thr389 and Akt Ser473, respectively).

Solubility Information

Solubility	DMSO: 5.45 mg/mL (19.37 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5548 mL	17.774 mL	35.548 mL
5 mM	0.711 mL	3.5548 mL	7.1096 mL
10 mM	0.3555 mL	1.7774 mL	3.5548 mL
50 mM	0.0711 mL	0.3555 mL	0.711 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ballou LM,et al. Inhibition of mammalian target of rapamycin signaling by 2-(morpholin-1-yl)pyrimido[2,1-alpha] isoquinolin-4-one. J Biol Chem. 2007 Aug 17;282(33):24463-70. Epub 2007 Jun 11.

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