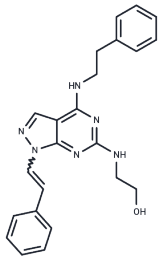
Data Sheet (Cat.No.T9589)

TargetMol

SI-113

Chemical Properties



CAS No. : 1392816-46-4

Formula: C23H24N6O

Molecular Weight: 400.48

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	SI-113 is a potent and selective inhibitor of SGK1, a serine/threonine protein kinase, that modulates several oncogenic signaling cascades.
Targets(IC50)	SGK
In vitro	Cell viability, cell death, caspase activation and cell cycle progression were then analyzed by FACS and WB-based assays, after exposure to SI113, with or without oxidative stress and ionizing radiations. Moreover, autophagy and related reticulum stress response were evaluated. We show here, that i) SGK1 is over-expressed in highly malignant gliomas and that the treatment with SI113 leads to ii) significant increase in caspase-mediated apoptotic cell death in GBM cell lines but not in normal fibroblasts; iii)enhancement of the effects of ionizing radiations; iv) modulation of the response to oxidative reticulum stress; v) induction of cytotoxic autophagy[2].

Solubility Information

Solubility	DMSO: 65 mg/mL (162.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.497 mL	12.485 mL	24.970 mL
5 mM	0.4994 mL	2.497 mL	4.994 mL
10 mM	0.2497 mL	1.2485 mL	2.497 mL
50 mM	0.0499 mL	0.2497 mL	0.4994 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

Matteoni S, et al. The kinase inhibitor SI113 induces autophagy and synergizes with quinacrine in hindering the growth of human glioblastoma multiforme cells. J Exp Clin Cancer Res. 2019 May 17;38(1):202.
Xiong Y, Li C, Yu J, et al.A novel trifluoromethyl quinoline derivative targeting SGK1 inducing autophagy and apoptosis via regulating mTOR/FOXO3a pathway in glioblastoma.Arabian Journal of Chemistry.2024: 105909.
Talarico C, et al. SI113, a SGK1 inhibitor, potentiates the effects of radiotherapy, modulates the response to oxidative stress and induces cytotoxic autophagy in human glioblastoma multiforme cells. Oncotarget. 2016 Mar 29;7(13):15868-84.