ML281

Cat. No.: HY-13495

CAS No.: 1404437-62-2

Molecular Formula: $C_{22}H_{19}N_3O_2S$

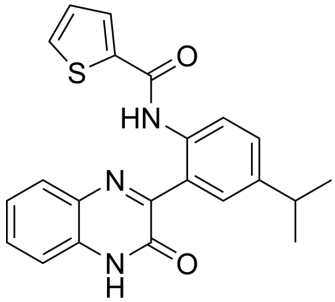
Molecular Weight: 389.47

Target: STK33

Pathway: Cell Cycle/DNA Damage

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (256.76 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.5676 mL	12.8380 mL	25.6759 mL
	5 mM	0.5135 mL	2.5676 mL	5.1352 mL
	10 mM	0.2568 mL	1.2838 mL	2.5676 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

ML281 is a potent and selective STK33 inhibitor with IC50 of 14 nM. ML281 showed a 550-fold selectivity over AurB and greater than 700-fold selectivity over PKA.target: STK33IC50: 14 nM [1]ML281 showed low nanomolar inhibition of purified recombinant STK33 and a distinct selectivity profile as compared to other STK33 inhibitors. Even at the highest concentration tested (10 μM), ML281 had no effect on the viability of KRAS-dependent cancer cells. [2]

In Vitro

ML281 (10 μM; 72 hours) suppresses cell viability of NCI-H446 cells[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[3]

Cell Line:	NCI-H446 cells
Concentration:	10 μM
Incubation Time:	72 hours

Result:	Suppressed cell viability of NCI-H446 cells.

CUSTOMER VALIDATION

- Nat Commun. 2019 Sep 19;10(1):4266.
- Neoplasma. 2017;64(6):869-879.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. We?wer M et al. A Potent and Selective Quinoxalinone-Based STK33 Inhibitor Does Not Show Synthetic Lethality in KRAS-Dependent Cells. ACS Med Chem Lett, 2012 Dec 13, 3(12):1034-1038.

[2]. Spoonamore J et al. Screen for Inhibitors of STK33 Kinase Activity. National Center for Biotechnology Information (US); 2010-2011 Dec 16.

[3]. Sun EL, et al. Knockdown of human serine/threonine kinase 33 suppresses human small cell lung carcinoma by blocking RPS6/BAD signaling transduction. Neoplasma. 2017;64(6):869-879.

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