Product Data Sheet

ML367

 Cat. No.:
 HY-122198

 CAS No.:
 381168-77-0

 Molecular Formula:
 $C_{19}H_{12}F_2N_4$

 Molecular Weight:
 334.32

Target: Checkpoint Kinase (Chk)
Pathway: Cell Cycle/DNA Damage

Storage: Powder -20°C 3

-20°C 3 years 4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 125 mg/mL (373.89 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9911 mL	14.9557 mL	29.9115 mL
	5 mM	0.5982 mL	2.9911 mL	5.9823 mL
	10 mM	0.2991 mL	1.4956 mL	2.9911 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (6.22 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.08 mg/mL (6.22 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (6.22 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

ML367 is a potent inhibitor of ATPase family AAA domain-containing protein 5 (ATAD5) stabilization, acts as a probe molecule that has low micromolar inhibitory activity. ML367 blocks DNA repair pathways, suppresses general DNA damage responses including RPA32-phosphorylation and CHK1-phosphorylation in response to UV irradiation^[1].

IC₅₀ & Target

ATAD5^[1]

In Vitro

ML367 (0-40 μ M, 16 hours) inhibits FLAG-ATAD5 stabilization in HEK293T cells in the presence or absence of 20 μ M 5-FUrd^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis $^{[1]}$

Cell Line:	HEK293T cells	
Concentration:	0-40 μM in the presence or absence of 20 μM 5-Furd	
Incubation Time:	16 hours	
Result:	Inhibited the increased ATAD5 protein levels induced by 5-Furd.	

REFERENCES

[1]. Rohde JM, et al. Discovery of ML367, inhibitor of ATAD5 stabilization. Probe Reports from the NIH Molecular Libraries Program.

Caution: Product has not been fully validated for medical applications. For research use only.

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