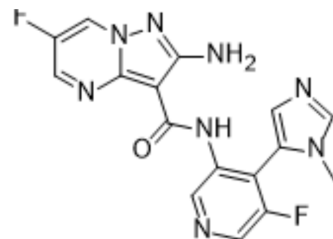


Tuvusertib

Cat. No.:	HY-111451		
CAS No.:	1613200-51-3		
Molecular Formula:	C ₁₆ H ₁₂ F ₂ N ₈ O		
Molecular Weight:	370.32		
Target:	ATM/ATR		
Pathway:	Cell Cycle/DNA Damage; PI3K/Akt/mTOR		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 5 mg/mL (13.50 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7004 mL	13.5018 mL	27.0037 mL
	5 mM	0.5401 mL	2.7004 mL	5.4007 mL
	10 mM	0.2700 mL	1.3502 mL	2.7004 mL

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

BIOLOGICAL ACTIVITY

Description

Tuvusertib (M1774; ATR inhibitor 1) is a selective and orally active ATR inhibitor extracted from patent WO2015187451A1, compound I-I, with a K_i value below 1 μM^[1].

IC₅₀ & Target

K_i: less than 1 uM^[1]

In Vitro

Tuvusertib (0-2 μM, 24 h) induces cell death and cell apoptosis in myeloma cells (such as U266 and OPM2 cells)^[2].

Tuvusertib (0-5 μM, 16 or 24 h) inhibits STAT3 p-Y705 phosphorylation and down-regulates STAT3 downstream targets (c-MYC) in U266 and OPM2 cells^[2].

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

Western Blot Analysis^[2]

Cell Line: U266 and OPM2 cells

Concentration: 0-2 μM

Incubation Time:	24 h
Result:	Increased level of γ H2A.X, cleavage of caspase-3, and cleavage of PARP.

REFERENCES

[1]. Lin Li, et al. Non-canonical role for the ataxia-telangiectasia-Rad3 pathway in STAT3 activation in human multiple myeloma cells

[2]. Nadia AHMAD, et al. Radiolabelled derivatives of a 2-amino-6-fluoro-n-[5-fluoro-pyridin-3-yl]- pyrazolo[1,5-a]pyrimidin-3-carboxamide compound useful as atr kinase inhibitor, the preparation of said compound and different solid forms thereof. WO2015187451A1

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA