PARP11 inhibitor ITK7

Cat. No.: HY-125218

CAS No.: 2411890-36-1

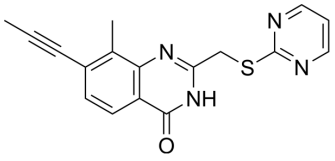
Molecular Formula: $C_{17}H_{14}N_4OS$

Molecular Weight: 322.38

Target: PARP

Pathway: Cell Cycle/DNA Damage; Epigenetics

Storage: 4°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 4 mg/mL (12.41 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1019 mL	15.5096 mL	31.0193 mL
	5 mM	0.6204 mL	3.1019 mL	6.2039 mL
	10 mM	0.3102 mL	1.5510 mL	3.1019 mL

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

BIOLOGICAL ACTIVITY

Description

PARP11 inhibitor ITK7 (ITK7) is a potent and selective PARP11 inhibitor. PARP11 inhibitor ITK7 can potently inhibit PARP11 with an IC_{50} value of 14 nM. PARP11 inhibitor ITK7 can be used for the research of cellular localization[1]. PARP11 inhibitor ITK7 is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.

IC_{50} & Target

IC50: 14 nM (PARP11); 13 nM (PARP11-dependent auto-MARylation)[1]

In Vitro

PARP11 inhibitor ITK7 (ITK7) can potently inhibit PARP11 with an IC_{50} value of 14 nM[1].
ITK7 exhibits a dose-dependent inhibition of PARP11-dependent auto-MARylation with an EC_{50} value of 13 nM[1].
ITK7 (0, 0.03, 0.1, 0.3, 1, 3 μM; 3 h) inhibits PARP11 auto-MARylation activity in cells and causes PARP11 to dissociate from the nuclearenvelope[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	HeLa cells

Concentration:	0, 0.03, 0.1, 0.3, 1, 3 μM
Incubation Time:	3 h
Result:	Inhibited GFP-PARP11 auto-MARylation activity in a dose-dependent manner in HeLa cells.

REFERENCES

[1]. Kirby, Ilsa T et al. A Potent and Selective PARP11 Inhibitor Suggests Coupling between Cellular Localization and Catalytic Activity. Cell chemical biology vol. 25,12 (2018): 1547-1553.e12.

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