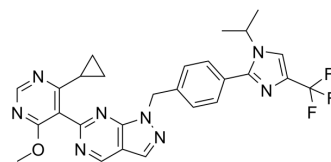


KSQ-4279

Cat. No.:	HY-145471		
CAS No.:	2446480-97-1		
Molecular Formula:	C ₂₇ H ₂₅ F ₃ N ₈ O		
Molecular Weight:	534.54		
Target:	Deubiquitinase; Apoptosis		
Pathway:	Cell Cycle/DNA Damage; Apoptosis		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 80 mg/mL (149.66 mM; Need ultrasonic)					
		Solvent	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	Concentration				
		1 mM		1.8708 mL	9.3538 mL	18.7077 mL
		5 mM		0.3742 mL	1.8708 mL	3.7415 mL
10 mM		0.1871 mL	0.9354 mL	1.8708 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 mg/mL (3.74 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2 mg/mL (3.74 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	KSQ-4279 (USP1-IN-1) is a potent, first-in-class, and highly selective USP1 inhibitor. KSQ-4279 shows anticancer effects ^[1] .
In Vitro	In BRCA1/2-mutated breast cancer cells, KSQ-4279 induces S-phase cell cycle arrest, marked accumulation of gamma-H2A histone family member X (γH2AX) and increases apoptosis ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	KSQ-4279 shows dose-dependent, robust and durable anti-tumor regression in multiple TNBC and ovarian cancer Patient-derived xenografts (PDXs) with varied genomic status including BRCA1-mutated and -wildtype models ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Natalie Y L Ngoi, et al. Targeting the DNA damage response beyond poly(ADP-ribose) polymerase inhibitors: novel agents and rational combinations. *Curr Opin Oncol.* 2022 Sep 1;34(5):559-569.

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

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