

# YKL-06-061

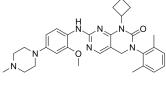
Cat. No.: HY-120056 CAS No.: 2172617-15-9 Molecular Formula:  $C_{30}H_{37}N_{7}O_{2}$ Molecular Weight: 527.66

Target: Salt-inducible Kinase (SIK) Pathway: Immunology/Inflammation

-20°C, protect from light, stored under nitrogen Storage:

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light, stored under

nitrogen)



**Product** Data Sheet

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 16.67 mg/mL (31.59 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	1.8952 mL	9.4758 mL	18.9516 mL	
	5 mM	0.3790 mL	1.8952 mL	3.7903 mL	
	10 mM	0.1895 mL	0.9476 mL	1.8952 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: ≥ 1.25 mg/mL (2.37 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (2.37 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description  $YKL-06-061\ is\ a\ potent,\ selective,\ second-generation\ salt-inducible\ kinase\ (SIK)\ inhibitor\ with\ IC_{50}\ values\ of\ 6.56\ nM/1.77$ nM/20.5 nM for SIK1/2/3, respectively<sup>[1]</sup>.

IC50: 6.56 nM/1.77 nM/20.5 nM (SIK1/2/3)<sup>[1]</sup>. IC<sub>50</sub> & Target

YKL 06-061 yields a dose-dependent increase in MITF mRNA expression [1]. In Vitro

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

 $\mathsf{RT}\text{-}\mathsf{PCR}^{[1]}$ 

Cell Line: UACC62 human melanoma cells, and UACC257 human melanoma cells.

Concentration:	0-4 μM (UACC62); 0-16 μM (UACC257).
Incubation Time:	3 hours.
Result:	Yielded a dose-dependent increase in MITF mRNA expression.

## **CUSTOMER VALIDATION**

- Cell Death Dis. 2022 Feb 25;13(2):188.
- JCI Insight. 2022 May 10;e150363.

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R	F	F	F	R	F	N	$\boldsymbol{c}$	FS

[1]. Mujahid N, et al. A UV-Independent Topical Small-Molecule Approach for Melanin Production in Human Skin. Cell Rep. 2017 Jun 13;19(11):2177-2184.

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

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