Inhibitors

CBS1117

Cat. No.: HY-131059 CAS No.: 959245-08-0 Molecular Formula: $C_{15}H_{20}Cl_{2}N_{2}O$

Molecular Weight: 315.24

Target: Influenza Virus Pathway: Anti-infection

Storage: Powder -20°C

3 years 4°C 2 years

In solvent -80°C 6 months

> -20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 250 mg/mL (793.05 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.1722 mL	15.8609 mL	31.7219 mL
	5 mM	0.6344 mL	3.1722 mL	6.3444 mL
	10 mM	0.3172 mL	1.5861 mL	3.1722 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 (6.60 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline) Solubility: ≥ 2.08 mg/mL (6.60 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (6.60 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	CBS1117 is a virus entry inhibitor with an IC $_{50}$ of 70 nM for influenza A virus, A/Puerto Rico/8/34 (H1N1). CBS1117 interferes with the hemagglutinin (HA)-mediated fusion process ^[1] .	
IC ₅₀ & Target	IC50: 70 nM (H1N1) ^[1]	
In Vitro	CBS1117 has a lower IC $_{50}$ value of 70 nM and higher CC $_{50}$ value of 274 μ M, leading to an excellent antiviral selectivity index value (SI value of 3914) in human lung epithelial cell line (A549) $^{[1]}$.	

REFERENCES
1]. Hussein AFA, et al. Identification of entry inhibitors with 4-aminopiperidine scaffold targeting group 1 influenza A virus. Antiviral Res. 2020 May;177:104782.
Caution: Product has not been fully validated for medical applications. For research use only.
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MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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