

# **Product** Data Sheet

### **CST626**

Pathway:

Cat. No.: HY-149924 Molecular Formula:  $C_{e_1}H_{e_2}N_{e_3}O_{e_3}S$  Molecular Weight: 1103.42

Target: PROTACs; IAP

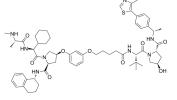
Storage: Powder -20°C 3 years

4°C 2 years

PROTAC; Apoptosis

In solvent -80°C 6 months

-20°C 1 month



#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (90.63 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.9063 mL	4.5314 mL	9.0627 mL
	5 mM	0.1813 mL	0.9063 mL	1.8125 mL
	10 mM	0.0906 mL	0.4531 mL	0.9063 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: 2.5 mg/mL (2.27 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility: 2.5 mg/mL (2.27 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (2.27 mM); Clear solution; Need ultrasonic

## **BIOLOGICAL ACTIVITY**

Description CST626 (Compound 9) is a pan-IAP degrader PROTAC. PROTAC pan-IAP degrader-1 degrades XIAP, cIAP1 and cIAP2 with DC<sub>50</sub> s of 0.7, 2.4, and 6.2 nM in MM.1S cells, respectively<sup>[1]</sup>.

In Vitro CST626 (Compound 9) induces cIAP1, cIAP2 and XIAP degradation in a dose-dependent manner with DC<sub>50</sub> values of 2.4 nM,

6.2 nM, and 0.7 nM, respectively<sup>[1]</sup>.

CST626 (0-10  $\mu$ M; 96 h) shows potent inhibition of cancer cell viability [1].

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$ 

Western Blot Analysis<sup>[1]</sup>

Cell Line:	MM.1S cells		
Concentration:	0.0001, 0.001, 0.01, 0.1 and 1 μM		
Incubation Time:	16 h		
Result:	Revealed DC $_{50}$ values of 2.4 nM (cIAP1), 6.2 nM (cIAP2), and 0.7 nM (XIAP).		
Cell Viability Assay <sup>[1]</sup>			
Cell Line:	SUDHL6, MOLM13, NCI-H929, K562, DB, JJN3, HEL, SUDHL4 and RPMI-8826 cells		
Concentration:	0.01, 0.04, 0.1, 0.4, 1, 4 and 10 μM		
Incubation Time:	96 h		
Result:	Inhibited cell viability with IC $_{50}$ s of 0.0016, 0.0021, 0.0085, 0.42, 0.46, 1.14, 1.17, 1.69 and 2.54 $\mu$ M against SUDHL6, MOLM13, NCI-H929, K562, DB, JJN3, HEL, SUDHL4 and RPMI-8826 cells, respectively.		

## **REFERENCES**

[1]. Ng YLD, et al. Heterobifunctional Ligase Recruiters Enable pan-Degradation of Inhibitor of Apoptosis Proteins. J Med Chem. 2023 Apr 13;66(7):4703-4733.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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