

# **Product** Data Sheet

### **UMB298**

Cat. No.: HY-139148

CAS No.: 2266569-73-5

Molecular Formula:  $C_{27}H_{31}ClN_4O_2$ Molecular Weight: 479.01

Target: Epigenetic Reader Domain

Pathway: Epigenetics

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

-20°C 1 month

## **SOLVENT & SOLUBILITY**

In Vitro DMSO: 25 mg/mL (52.19 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.0876 mL	10.4382 mL	20.8764 mL
	5 mM	0.4175 mL	2.0876 mL	4.1753 mL
	10 mM	0.2088 mL	1.0438 mL	2.0876 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:  $\geq$  2.5 mg/mL (5.22 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description	${\sf UMB298} \ is \ a \ potent \ and \ selective \ {\sf CBP/P300} \ bromodomain \ inhibitor^{[1]}.$	
IC <sub>50</sub> & Target	BRD4 5193 nM (IC <sub>50</sub> )	
In Vitro	UMB298 ( $0.01\sim10~\mu\text{M}$ ; 50 days; MOLM13 and MM cells) inhibits cells growth <sup>[1]</sup> . UMB298 ( $1\sim10~\mu\text{M}$ ; 2 hours; MOLM13 cells) reduces the H3K27ac level similar to CBP30 and causes MYC depletion as a signature of CBP inhibition in acute myeloid leukemia <sup>[1]</sup> . UMB298 ( $3~\mu\text{M}$ ; 2hours; MOLM13 cells) down-regulates MYC expression <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay <sup>[1]</sup>	

Cell Line:	MOLM13 and MM cells	
Concentration:	0.01~10 μM	
Incubation Time:	50 days	
Result:	Inhibited cells growth.	
Western Blot Analysis <sup>[1]</sup>		
Cell Line:	MOLM13 cells	
Concentration:	1~10 µM	
Incubation Time:	2 hours	
Result:	Reduced the H3K27ac level similar to CBP30 and caused MYC depletion as a signature of CBP inhibition in acute myeloid leukemia.	
RT-PCR <sup>[1]</sup>		
Cell Line:	MOLM13 cells	
Concentration:	3 μΜ	
Incubation Time:	2 hours	
Result:	Down-regulated MYC expression.	

### **REFERENCES**

[1]. Muthengi A, et al. Development of Dimethylisoxazole-Attached Imidazo[1,2-a]pyridines as Potent and Selective CBP/P300 Inhibitors. J Med Chem. 2021;64(9):5787-5801.

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

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: tech@MedChemExpress.com}$ 

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA